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Division 3

Rocket Ordnance

Compiled and Edited by
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DIVISION 3

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- 1200 Rocket and underwater ordnance, edited by Eliot B. Bradford. Washington, D. C., 1946. 381p. Contents.--I. Underwater ordnance, by E. B. Bradford.--II. Rocket propellants and interior ballistics, by B. H. Sage.--III. Rocket ordnance: Thermodynamics and related problems, by R. E. Gibson.--IV. Rocket weapons as developed and used in World War II, by C. W. Snyder.--V. Rocket ordnance: Theory, principles, and design, by E. B. Bradford. C

ALLEGANY BALLISTICS LABORATORY
See George Washington University, OEMsr-273.

BELL TELEPHONE LABORATORIES
See Western Electric Company, Inc., OEMsr-256.

BUDD INDUCTION HEATING, INC.
Detroit, Mich. OEMsr-671
Project OD-26. See also Budd Wheel Company, Inc., OEMsr-968.

- 1202 Hardening of inside diameters by inductive heat treatments, by H. E. Somes. July 1941. Reprinted from the Iron and Steel Engineer. R

BUDD WHEEL COMPANY, INC., Detroit, Mich. OEMsr-968
Projects CWS-10, CWS-30, CWS-34, NA-231, NO-35.1, NO-245, NO-247, NO-248, NO-249, NO-252, OD-14, OD-26, OD-96, OD-161, OD-163, OD-165, OD-166, OD-170, OD-184, OD-185, OD-196. See also George Washington University, OEMsr-273.

- 1203 Airborne flame thrower; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6136. C

- 1204 Development of a new 4.2" chemical mortar of radical design; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6145. C

- 1205 81 mm. recoilless mortar; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6150. C

- 1206 Extension of range of the 4.2" chemical mortar M2; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6144. C

- 1207 4½" rotated rockets; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6148. R

- 1208 High performance rocket, design studies; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6140. R

- 1210 Multiple powder charge launcher for JB-2; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6141. R

- 1211 115 mm. rocket; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6139. R

- 1212 Portable powder pressurized flame thrower; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6138. C

- 1213 Recoilless 4.2" chemical mortar; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6142. C

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| <p>1218 60 mm. recoilless mortar; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6149. C</p> <p>1219 Step motor rockets; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6146. R</p> <p>1220 Summary report of rocket developments; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Jan. 5, 1946. OSRD 6153. C</p> <p>1221 T-59 high velocity rocket grenade (super bazooka); final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6133. C</p> <p>1222 Tankborne flame thrower; final report by N. R. Droulard, W. W. Farr and W. B. Pope. Oct. 17, 1945. OSRD 6137. C</p> <p>1223 12" jet accelerated A. P. bomb; final report by N. R. Droulard, W. W. Farr, and W. B. Pope. Dec. 3, 1945. OSRD 6151. R</p> <p>1224 Analysis of 4½" motor with end nozzle loaded with single cylindrical stick of powder having hole in center and web thickness of 15/16", by N. R. Droulard. May 30, June 6, 7, 16 and July 17, 1944. Title varies. C</p> <p>1225 Design of 10" step motor rocket, by W. W. Farr, W. B. Pope and N. R. Droulard. Nov. 3, 1944. C</p> <p>1226 Elementary rocket design; stress analysis and tests (with particular reference to model T-41) by N. R. Droulard and W. J. Bortman. May 20, 1944. R</p> | <p>1227 4½" multi-jet rail motor, cone section, X-52095-E, by N. R. Droulard. May 12, 1944. C</p> <p>1228 4½" step motor, embossed & riveted with 1-11/16" O.D. burster, X-52036-E, by N. R. Droulard. May 5, 1944. Revision, June 17, 1944. Title varies. C</p> <p>1229 4½" step motor, embossed and riveted with 2" O.D. burster, X-52026-E, by N. R. Droulard. May 5, 1944. Revision, June 10, 1944. Title varies. C</p> <p>1230 4½" step motor - embossed and riveted with 2¼" O.D. burster, X-52009-E, by N. R. Droulard. May 5, 1944. C</p> <p>1231 4½" step motor loaded with H-3 powder, by C. N. Hickman. June 28, 1944. C</p> <p>1232 4½" step motor, non-rotational X-51599-B, by N. R. Droulard. May 5, 1944. C</p> <p>1233 4½" step motors, by N. R. Droulard. July 3, 1944. C</p> <p>1234 4½" two step motor - H3 powder X-52851-E for X-52852-B, by M. Goehmann. July 4 and 6, 1944. Title varies. C</p> <p>1235 Inspection and test data on model T-59 rocket bodies. Nov. 10, 1944. R</p> <p>1236 Investigation no. M-9; 4½" head from National Supply Co., Pittsburgh, Pa., by W. J. Bortman. Jan. 27, 1944. R</p> <p>1237 7.2" step motor, by N. R. Droulard. Dec. 8, 1944. C</p> <p>1238 Stresscoat analysis of 4.2 RCM chemical mortar, by F. B. Stern. Dec. 1, 1944. R</p> |
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CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, Calif. OEMsr-250
See California Institute of
Technology, OEMsr-418.

CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, Calif. OEMsr-418
Projects AC-52, AC-102, CWS-
22, NA-139, NC-20, NO-33, NO-
34, NO-34.2, NO-34.3, NO-
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168, OD-169. See also Divi-
sion 6, California Institute
of Technology, OEMsr-124 and
OEMsr-329.

1239 Aircraft torpedo development
and water entry ballistics
[final report] 1946. OSRD-
2550. R

1240 Ballistic data; fin-stabi-
lized and spin-stabilized
rockets [final report] 1946.
OSRD 2544. R

1241 Field testing of rockets:
range operations and metric
photography [final report]
1946. OSRD 2547. R

1242 Firing of rockets from air-
craft; launchers, sights,
flight tests [final report]
1946. OSRD 2549. R

1243 Processing of rocket propel-
lants; a treatise restricted
to propellants prepared by
dry extrusion from double-
base stock [final report] by
W. H. Corcoran and Quentin
Elliot. 1946. OSRD 2552. R

1244 Production of metal compo-
nents of rockets [final re-
port] by Kenneth L. Went-
worth. 1946. OSRD 2546. R

1245 Rocket fuzes [final report]
by R. B. King, V. K. Rasmus-
sen, J. B. Hatcher and H. E.
Fracker. 1946. OSRD 2545. R

1246 Rocket launchers for surface
use [final report] by Paul E.
Lloyd. 1946. OSRD 2548. R

1247 Water entry and underwater
ballistics of projectiles
[final report]. 1946. OSRD-
2551. C

1248 Abridged catalog, CIT rock-
ets. Mar. 15, 1945. UBC-34.
OSRD 2415. C

1249 Abridged catalog entry, CIT
launcher type 49. Aug. 10,
1944. IEC-14. C

1250 Abridged catalog, rocket
launchers. May 1, 1945.
UEC-5. OSRD 2440. C

1251 Abridged catalog; service
rockets, fuzes, and launch-
ers. Mar. 15, 1944. UMC-
42. OSRD 3563. Supplement,
Oct. 10, 1944. UMC-42.2.
OSRD 2224. C

1252 Abstract of British reports
on forward firing from air-
craft. Aug. 4, 1943. UMC-
7. Supplement, Sept. 28,
1943. UMC-7.2. C

1254 Accuracy of the CWR-N; local
intermediate report by C.
Weinland, J. W. McConnell and
F. W. Thiele. Sept. 25,
1943. IBC-39. C

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1255 Activities of the technical supervisors at the Eaton Canyon Pilot Plant, by J. I. Gates. Oct. 1, 1945. JDC-77. OSRD 2530. R</p> <p>1256 Addition of a rocket to a shell to increase the velocity; local intermediate report by Leverett Davis, jr. June 5, 1943. IPC-25. C</p> <p>1257 [Administrative reports] semi-monthly, by Trevor Gardner and E. E. Tuttle. Dec. 20, 1943-July 9, 1945. C</p> <p>1258 Afterbody and gyro pot pressures of the Mk 13 torpedo under hot steady running conditions, by O. D. Terrell. Mar. 15, 1945. NOC-4.3. C</p> <p>1259 Air drag test of 2-in. AAR; local intermediate report by F. E. Roach. June 19, 1943. IPC-36. C</p> <p>1259a Air flight and underwater characteristic tests of proposed VAB-7V vertical air bombs, by B. H. Rule and W. P. Huntley. [Jan. 1943] IPC-13. C</p> <p>1260 Air flight tests of 8-in. diameter model torpedoes, by B. H. Rule and W. P. Huntley. Sept. 26, 1944. IOC-34. OSRD 2227. C</p> <p>1260a AIR fuse, by B. H. Rule and W. P. Huntley. [Oct. 29, 1942] IPC-16. C</p> <p>1261 Air resistance of the CWB, by Leverett Davis, jr. and Hsue-shen Tsien. Feb. 19, 1943. OBC-19. C</p> | <p>1262 Airborne rockets; weekly progress reports by P. E. Edelman, W. A. Fowler, W. Fowlie, O. D. Frampton, M. B. Gentry, A. E. Harris, R. Jacquith, W. E. Kane, J. L. Kavanan, A. Keast, G. A. Kendall, L. H. Mahony, A. L. Melzian, V. Rasmussen, G. Saffonov, F. W. Thiele, L. Trilling and C. H. Wilts. Mar. 12, 1944-Sept. 15, 1945. Report nos. PMC-2.23, 2.34, 2.36-2.89 (Part 2). OSRD nos. 2114, 2121, 2128, 2137, 2142, 2148, 2155, 2163, 2169, 2178, 2183, 2193, 2200, 2208, 2214, 2219, 2229, 2238, 2245, 2250, 2258, 2266, 2277, 2286, 2293, 2300, 2307, 2316, 2322, 2329, 2335, 2341, 2352, 2360, 2368, 2376, 2385, 2391, 2397, 2402, 2411, 2417, 2424, 2435, 2442, 2452, 2461, 2470, 2478, 2487, 2494, 2506, 2511, 2521, 3457, 3764. C</p> <p>1263 The aircraft rocket training aid. Jan. 15, 1945. IHC-20. R</p> <p>1264 Ammunition catalogue, CIT rockets. Aug. 10, 1943. JBC-20. Revision sheet for first edition of JBC-20, Feb. 10, 1944. C</p> <p>1265 Ammunition data sheets, 4.5 BR. Feb. 27-Apr. 25, 1943. R</p> <p>1266 Ammunition dispersion of long-burning unrotated rockets in forward firing from airplanes; local intermediate report by Leon Blitzer. Apr. 10, 1944. IPC-39.2. Revision of IPC-39. C</p> <p>1267 Ammunition manual for the 4"5 barrage rocket (1100 yd). July 26, 1943. JBC-19. R</p> <p>1268 Amplification and extension of CIT/OPC 3.1, 12 Dec. 44, by Leverett Davis, jr. Dec. 14, 1944. C</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- 1269 Analysis of forward firing data from TBM and PV-1; local intermediate report by Leon Blitz. Sept. 1943. IPC-46. C
- 1270 Analysis of Mk 13 propeller steel, by Tom Curtis. Feb. 21, 1945. NOC-51.1. C
- 1271 An analysis of the Bourdon coil; local intermediate report by B. N. Locanthi. June 27, 1945. IGC-10. R
- 1272 Analysis of the causes of dispersion of the 4.5 inch barrage rocket. Dispersion data on CIT rockets. May 17, 1943. JPC-8. Supplement, June 11, 1943. JPC-8.2. C
- 1276 The antisubmarine bomb (ASB). I, by W. N. Arnquist, Leverett Davis, jr., T. Lauritsen, J. McMorris and W. R. Smythe. June 25, 1942. JEC-7. II, Appendix, June 25, 1942. C
- 1277 The antisubmarine bomb. II, The propellant, with an appendix containing excerpts from weekly reports on the development of the antisubmarine bomb and its propellant, by W. N. Arnquist, Leverett Davis, jr., T. Lauritsen, J. McMorris and W. R. Smythe. Aug. 8, 1942. A-77. OSRD 803. C
- 1277a [Antisubmarine bombs] Weekly progress report by C. W. Snyder. Dec. 6, 1942. NMC-1.58. C
- 1278 The antisubmarine rocket projectile (AS-UP), by T. Lauritsen. Apr. 25, 1942. JBC-5. C
- 1279 The antisubmarine rocket projectile and projector; progress report by T. L. Lauritsen and W. R. Smythe. May 8, 1942. A-50. OSRD 563. C
- 1280 The antisubmarine rocket projector; interim report by W. R. Smythe. Apr. 27, 1942. JEC-3. C
- 1281 [Antisubmarine rockets] Weekly progress reports. Apr. 5 and 12, 1942. PMC-1.23, 1.24. C
- 1282 Approximate curves for the trajectory of the 5"0 HCSR during the first 8 seconds, by Leverett Davis, jr. and L. I. Epstein. Jan. 12, 1945. OPC-15. Supplement, Aug. 2, 1945. C
- 1283 An approximate formula for the variation of dispersion due to dynamic unbalance with launcher length and burning time, by Leverett Davis, jr. Dec. 26, 1944. OPC-15. C
- 1284 Approximate formulae for calculation of deflection of rockets, by J. G. Waugh. [Nov. 3, 1943] IPC-45. C
- 1285 An approximate method of computing hit probabilities for rectangular barrage patterns, by N. A. Haskell. Aug. 24, 1945. INC-6. C
- 1285a Arming and firing tests of Mark #31 fuze, by B. H. Rule and W. P. Huntley. [Dec. 30, 1942] IIC-6. C
- 1286 Artillery rockets, by C. C. Lauritsen. Mar. 15, 1944. RBC-1. OSRD 3431. C
- 1287 A/S projectiles; local intermediate report by Rasmussen, Arnquist, Anthony and T. Lauritsen. Apr. 11, 1942. IBC-3. C
- 1288 A/S projector charges - terminal velocity summary, by Bruce H. Rule and W. P. Huntley. Aug. 18, 1943. IPC-38. C

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1289 A/S warfare. Weekly progress reports by L. N. Slichter. Dec. 26, 1943-June 25, 1944. Report nos. P.C-2.12, 2.14, 2.15, 2.17, 2.24, 2.38 (Part 7). OSRD nos. 2133, 3096, 3192, 3226, 3275, 3497. C</p> <p>1290 The ASB retrieving line, by J. Edson. [June 3, 1942] IBC-9. R</p> <p>1291 ASPC sub-caliber underwater performance tests, by B. H. Rule and W. P. Huntley. June 23-Oct. 21, 1943. IPC-32, 32.1, 32.2. Title varies. C</p> <p>1292 Assembly and disassembly of CIT rocket fuzes; special edition for rocket school, by O. C. Wilson. [194-] OIC-13. C</p> <p>1293 Assembly and installation of barrage rocket launcher CIT type 2, for $\frac{1}{2}$-ton 4x4 truck. July 24, 1943. JEC-10.2. R</p> <p>1294 Assembly instructions, safety precautions, and firing instructions for 5"0 high velocity aircraft rocket. June 23, 1944. IBC-68. R</p> <p>1295 ATG report, by S. Rubin. Jan. 13, 1942. IBC-1. C</p> <p>1296 Attitude and roll study of Mk 13 shape torpedo subsequent to entry, by Saul Baker. Jan. 11, 1946. NOC-6.2. C</p> <p>1297 Auxiliary equipment for CIT rotating mirror camera and further notes on the camera; technical report by Ira S. Bowen. June 8, 1945. K-3.3. R</p> <p>1298 Available propellant shapes. July 31, 1944. IDC-19. C</p> | <p>1299 Ballistic and physical characteristics of a Japanese rocket propellant, by Bruce H. Sage. Dec. 30, 1945. JDC-91. C</p> <p>1300 Ballistic and physical characteristics of Japanese rocket propellant; initial statement and status reports 1-6 by S. Altshuler, D. F. Botkin and B. H. Levedahl. Jan. 4-Apr. 13, 1945. LP-213. C</p> <p>1300a Ballistic data for the 5"0/5 SmSR Mdl 127, by P. H. Taylor. Feb. 15, 1945. OPC-15.1. C</p> <p>1301 The ballistics of firing an ASB backwards from an airplane, by Leverett Davis, jr. Aug. 10, 1942. ITC-4. C</p> <p>1302 Barrage rocket jacking box projector; local intermediate report. May 22, 1943. IBC-28. C</p> <p>1303 Bending stresses in a bomb case at water impact, by N. A. Haskell. Aug. 25, 1944. IOC-33. C</p> <p>1304 Bibliography of published reports. Oct. 19, 1941-Aug. 31, 1946. UMC-8.4. R</p> <p>1305 Bibliography of published reports. Bibliographies dated June 1, 1944-Aug. 1945. Report numbers UMC-8.3, 11.2x, 11.3x, 11.4-11.14. OSRD-2515. C</p> <p>1307 Bibliography of reports on forward firing, by L. Blitzler. Dec. 7, 1944. OBC-21.1. R</p> <p>1308 Boresighting and effective angle of attack data for various aircraft. Oct. 25, 1944. UNC-2. OSRD 2254. R</p> |
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|------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1309 | BR crew training manual.
Nov. 2, 1942. OBC-18. C | 1320 | Burning characteristics in
the axial perforations of ex-
truded Ballistite grains, by
B. H. Sage. July 30 and Aug.
21, 1942. A-83, JDC-13.
OSRD 815. C |
| 1310 | BR firing at MAAR; field re-
port. Mar. 1943. IBC-20. C | 1321 | Burning rate of four-spoke
grains of extruded Ballis-
tite, by B. H. Sage. Sept.
25, 1942. JDC-18. C |
| 1311 | BR fragmentation, by O. C.
Wilson. July 7, 1943. IQC-
1. C | 1322 | Calculated motion of forward-
fired spin-stabilized rockets
including aerodynamic ef-
fects; local intermediate re-
port by T. H. Pi. Mar. 2,
1945. IPC-70. C |
| 1312 | BR parachute drops; local in-
termediate reports by J. E.
Thomas, Paul E. Lloyd and R.
D. Ridgeway. Oct. 20 and
Dec. 6, 1943. Report nos.
IBC-53, 57. C | 1323 | Calculated performance char-
acteristics of 36 in. and 48
in. compressed air launching
tubes, by O. D. Terrell.
Aug. 21, 1945. NOC-32.3. C |
| 1313 | Brief history of the develop-
ment of the 3"5 aircraft
rocket. May 10, 1944. JBC-
25. C | 1324 | Calculation of mallaunching
of spin-stabilized rockets,
by L. Davis, jr. and J. G.
Waugh. Sept. 20, 1944. JPC-
22. OSRD 2235. C |
| 1314 | Brief history of the project,
by T. Lauritsen. May 11,
1944. OBC-53. C | 1325 | Calculation of probable er-
ror; local intermediate re-
port by W. R. Smythe. Dec.
8, 1942. TPC-1. C |
| 1316 | British type "C" projectile,
by B. H. Rule, W. P. Huntley,
Max Anson and L. B. Slichter.
June 21, Sept. 20 and Nov.
30, 1944. Report nos. IOC-
28, 28.2, 28.4. OSRD 2270.
Title varies. C | 1327 | The calculation of the mal-
launching produced by stat-
ically or dynamically unbal-
anced rounds, by Leverett Da-
vis, jr. Dec. 12, 1944.
OPC-3.1. C |
| 1317 | Bureau of Ordnance Mark 2
subcaliber VAR underwater
performance tests, by B. H.
Rule and W. P. Huntley.
Sept. 18, 1943. IPC-41. C | 1328 | Cap firing mechanisms, by H.
N. Bane. Mar. 26, 1945.
NOC-46.1. C |
| 1318 | Bureau of Ordnance subcaliber
ammunition for A.S. projector
Mark 10 (hedgehog) underwater
performance tests, by B. H.
Rule and W. P. Huntley.
Sept. 21, 1943. IOC-11. C | 1330 | Catalog: CIT rocket fuzes.
Jan. 15, 1944. UIC-3. OSRD-
3290. R |
| 1319 | Bureau of Ordnance subcaliber
ASPC underwater performance
tests, by B. H. Rule and W.
P. Huntley. Sept. 18, 1943.
IPC-40. C | 1331 | Catalog: Forward-firing air-
craft rockets. Nov. 1, 1943.
JBC-22. C |

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| <p>1332 The cause of abnormally short range BR shots; local intermediate report by J. E. Thomas. Oct. 1, 1943. IBC-49. C</p> <p>1332a Cavitation and bubble studies, by William H. Christie and F. R. Watson. Sept. 24, 1945. NOC-59.1. C</p> <p>1333 Cemented joints of Ballistite columns, by J. McMorris. Feb. 13, 1942. IDC-7. C</p> <p>1333a Changes occurring in propellant grains after extrusion, by Bruce H. Sage. Sept. 28, 1943. IDC-38. C</p> <p>1334 Characteristics of double-base propellants containing nigrosine and carbon black, by B. H. Sage. July 16, 1943. JDC-43. C</p> <p>1335 Characteristics of HIR fuse for mousetrap ammunition, by T. Lauritsen. June 3, 1942. IIC-1. C</p> <p>1336 Characteristics of the PIR fuze; preliminary report by Thomas L. Lauritsen, J. G. Waugh and V. Rasmussen. Aug. 3, 1942. JIC-1. C</p> <p>1337 Charge design, two-inch ASB motor, by J. McMorris. June 25, 1942. JDC-10. C</p> <p>1338 The chemical warfare bomb, by R. B. King and W. H. Sleeper, jr. Aug. 20 and 31, 1942. A-86, JBC-11. OSRD 866. C</p> <p>1340 The chemical warfare grenade (CWG), by R. B. King, S. Rubin and O. C. Wilson. May 20, 1942. JBC-6. C</p> | <p>1341 The choice of a launcher angle to give an impact pattern which represents the directions of motion at the end of burning, by Leverett Davis, jr. May 5, 1944. IPC-58. C</p> <p>1342 The CIT acceleration camera, models 3 and 4, by Clyde Chivens. Aug. 25, 1945. JFC-3. OSRD 2518. R</p> <p>1343 The CIT aircraft rocket sight type 2, by H. W. Babcock. Oct. 15, 1944. JNC-23. OSRD 2263. C</p> <p>1344 CIT aircraft rocket sight type 3, by H. W. Babcock. May 28, 1945. ORC-1.52. C</p> <p>1345 The CIT camera for measuring accelerations and velocities of projectiles; preliminary report by I. S. Bowen and J. B. Edson. Feb. 16, 1942. IFC-1. C</p> <p>1346 CIT fuzes. Jan. 15, 1943. UIC-2. C</p> <p>1347 CIT launcher catalog. Feb. 7, 1944. JEC-14. R</p> <p>1348 CIT news letters. May 15-July 15, 1944. LMC 1.1-1.4. OSRD nos. 2106, 2135, 2146, 3736. C</p> <p>1349 CIT rocket targets, by J. B. Edson. June 12, 1943. JBC-17. C</p> <p>1350 CIT rocket weapons and test facilities; an illustrated record. Feb. 1, 1943. JBC-14. C</p> <p>1351 CIT rockets. Nov. 18, 1942. UBC-1. C</p> |
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| <p>1352 The CIT rotating mirror camera (Mod 2); technical report by I. S. Bowen. Apr. 27, 1945. K-3.1. R</p> <p>1353 CIT torpedo launching range, Morris Dam Reservoir; general description of facilities, by F. C. Lindvall. Oct. 15, 1943. JHC-2. C</p> <p>1354 CIT type 1 Mod 1 launcher (single-rail 4"5 BR). June 26, 1943. JEC-8. C</p> <p>1355 CIT type 3 firing box. July 22, 1943. JEC-9.2. R</p> <p>1356 CIT type 3 launcher (wooden 3-rail for 4"5 barrage rocket). July 1, 1943. JEC-9. R</p> <p>1357 CIT type 8 launcher for 4"5 barrage rocket. Aug. 4, 1943. JEC-11. R</p> <p>1358 CIT type 33 Universal Emplacement Launcher; local intermediate report by H. A. Meneghell. Mar. 1, 1944. IEC-11. C</p> <p>1359 Closed-breech ballistic data, by A. B. Meinel. Jan. 18, 1945. OPC-15.1. C</p> <p>1360 Closed-breech SR rocket launcher, CIT type 38 and 56. Apr. 30, 1945. JEC-25. OSRD 2457. C</p> <p>1361 Closures and seals for rocket motors, by B. H. Sage. Nov. 19, 1945. IAC-19. R</p> <p>1362 The coil spring decelerometer; local intermediate report by R. Stokes. Jan. 3, 1944. IHC-6. C</p> | <p>1363 Comment on the damping moments of a rocket in flight, by L. Blitzler. Sept. 25, 1944. OPC-3.1. C</p> <p>1364 Comparative behavior of Ballistite from Kenvil and Radford, by B. H. Sage. Oct. 14, 1942. JDC-21. C</p> <p>1366 Comparative trajectories of various AA rockets; local intermediate report by Leverett Davis, jr. June 3, 1943. IBC-31. C</p> <p>1367 Comparison between the 81-mm. mortar and the 4"5 barrage rocket; local intermediate report by E. Thomas and P. Lloyd. Sept. 23, 1943. IBC-51. C</p> <p>1368 Comparison of design and performance of 7-in. CWR and 7.2-in. CWR-N; local intermediate report by T. Lauritsen. [194-] IBC-47. C</p> <p>1369 Comparison of experimental and predicted pressure distribution around a 1.7 inch by 0.6 inch by 11.5 inch grain, by R. N. Wimpless, B. H. Sage and W. N. Lacey. Apr. 13, 1942. ODC-5. C</p> <p>1370 Comparison of fin and rotational stabilization of rockets, by C. C. Lauritsen. Jan. 25, 1944. JPC-15. OSRD 3271. C</p> <p>1371 Comparison of fragmentation of the 4"5 barrage rocket with the 105 mm. howitzer shell; local intermediate report by O. C. Wilson, C. A. Wirtanen and J. A. Gilbert. July 30, 1943. IQC-2. C</p> <p>1371a Comparison of static firing and range results for ASB, by J. Foladare and F. E. Roach. June 28, 1942. NMC-1.35. C</p> |
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| <p>1372 Comparison of water tunnel tests on the 2$\frac{1}{4}$-in. projectile with field results, by Leverett Davis, jr. June 12, 1943. OPC-6. C</p> <p>1373 The compressive characteristics of several propellants determined at a constant rate of stress application, by D. S. Clark. Oct. 11, 1945. JDC-80. OSRD-2534. C</p> <p>1374 Compressive, torsional and shear characteristics of some double-base propellants, by Bruce H. Sage. Nov. 1, 1945. JDC-81. C</p> <p>1375 Computation of drag and deceleration coefficients of 5"0/10 GPSR, by T. H. Pi. Mar. 12, 1945. IPC-71. C</p> <p>1376 Computation of effective rocket temperatures in 3.25-in., 5.0-in. and 11.75-in. motors. July 2, 1945. UNC-1 supplement. C</p> <p>1377 Computing manual for Muroc flight test station. Apr. 10, 1945. IPC-73. R</p> <p>1379 Cone centering device - Mark XII-1 gyro, modification 1 and 2, by R. R. Stokes. Feb. 22, 1945. NOC-4.1. C</p> <p>1380 Confidential bulletin; published semi-monthly. Aug. 1, 1944-July 15, 1945. LMC 1.5-1.26. OSRD 2153, 2175, 2197, 2226, 2243, 2256, 2283, 2304, 2327, 2358, 2373, 2389, 2406, 2429, 2432, 2447, 2450, 2459, 2466, 2485, 2502, 2503. C</p> <p>1381 Consideration involved in the design of short-burning, long-range rockets; local intermediate report by Leverett Davis, jr. Sept. 10, 1945. IPC-80. C</p> | <p>1382 A consideration of vertical pitch measurements by means of motion pictures; technical memorandum by G. M. Safonov. Revised Aug. 10, 1945. OMC-18.1. C</p> <p>1384 The copper ball decelerometer; local intermediate report by R. Stokes. Jan. 3, 1944. IHC-12. C</p> <p>1385 Correlation between 1-in. diameter model of Mark 13-2 dummy torpedo and the prototype, by F. C. Lindvall, Max Mason and L. B. Slichter. Dec. 15, 1944. IOC-37. OSRD 2320. C</p> <p>1385a Corrosion tests on various metals in solutions of smokeless powder, by Bruce H. Sage. Feb. 20, 1943. ILC-27. C</p> <p>1386 Corrosive effect of solutions of double-base powder on various metals, by B. H. Sage. Jan. 11, 1944. JDC-58. OSRD 3705. C</p> <p>1387 Curvatures and other geometrical characteristics of selected nose types, by Max Mason and L. B. Slichter. Nov. 25, 1944 and Jan. 15, 1945. IPC-67. OSRD 2350. Title varies. C</p> <p>1388 Curves for calculation of trajectories during burning of fin-stabilized rockets, by L. Blitzer, L. I. Epstein and M. C. Houghton. May 3, 1945. OPC-34. C</p> <p>1389 Curves for external ballistic calculations on low-velocity rockets fired at high angles, by Leverett Davis, jr. Dec. 17, 1942. JPC-2. 2nd edition Aug. 20, 1943. JPC-2.2. C</p> <p>1390 Curves for the prediction of ranges; local intermediate report by F. E. Roach. June 1, 1943. IPC-26. C</p> |
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| <p>1391 CWG; local intermediate report by S. Rubin. Feb. 5, 1942. IBC-2. C</p> <p>1392 Damage to Mark 26-3 exercise head, by Tom Curtis. Mar. 21, 1945. NOC-7.2. Appendix, by D. E. Hudson. May 14, 1945. C</p> <p>1393 Damage to the special I, CIT stiffened afterbody. Feb. 7, 1945. WOC-7.1. C</p> <p>1394 Deceleration coefficient of the 2-in. AA at high velocities; local intermediate report by Leverett Davis, jr. Apr. 22, 1943. IPC-23. C</p> <p>1395 Deflection and dispersion of ASB's; local intermediate report by C. W. Snyder. Nov. 25, 1942. IBC-10. C</p> <p>1396 Deflection of a rotating rocket due to mallaunching, by Leverett Davis, jr. Aug. 10, 1944. JPC-20. OSRD-2188. C</p> <p>1397 Deflection of rockets by wind; local intermediate report by R. J. Kennedy and W. N. Arnquist. June 30, 1943. IPC-31. C</p> <p>1398 The DeForest scratch gage decelerometer; local intermediate report by R. Stokes. Jan. 3, 1944. IHC-9. C</p> <p>1399 Delay ejector units for the 3.5-in. "window" rocket, by B. H. Sage. July 19, 1945. JKC-1. OSRD 2542. C</p> <p>1400 The dependence of the mass of propellant in a rocket motor on the web thickness and the motor dimensions, by Leverett Davis, jr. and Chester D. Mills, jr. Feb. 25, 1943. JAC-4. C</p> | <p>1402 The dependence of the masses of rocket components on their dimensions, by Leverett Davis, jr. Dec. 10, 1942. TAC-1. C</p> <p>1404 Description and instructions for use, CIT type 6 Mod 1 launcher for the 4"5 barrage rocket (120-barrel for 2½-ton 6 x 6 amphibious truck, DUKW); manuals. Nov. 10, 1943 and Mar. 20, 1944. JEC-13, 13.2. OSRD 3592. R</p> <p>1405 Description and instructions for use, CIT type 7 Mod 1 launcher for 7"2 rockets (42-rail for 2½-ton 6 x 6 amphibious truck, DUKW); manual, by A. S. Gould. Feb. 4, 1944. JEC-15. OSRD 3302. C</p> <p>1406 Description and instructions for use, CIT type 8 and type 8 Mod 1 launcher for 4"5 barrage rocket; manual. Oct. 14, 1942. JEC-11.2. R</p> <p>1407 Description and instructions for use, CIT type 31C launcher; manual by H. A. Meneghelli. May 1, 1944. IEC-12. C</p> <p>1408 Description and instructions for use, CIT type 31C (shipboard) launcher; manual by H. A. Meneghelli. July 15, 1944. JEC-17. OSRD 2167. R</p> <p>1409 Description and instructions for use, 4"5 rocket launcher Mk 7 (CIT type 8); manual by L. A. Richards. Mar. 27, 1944. JEC-11.3. OSRD 3615. R</p> <p>1410 Description and instructions for use of Mk 35 Mod 0 launcher (CIT type 46B). Mar. 15, 1945. JEC-22. OSRD 2407. R</p> <p>1411 Description and tentative specifications for loading the motor of AS projector charge. Revised Feb. 15, 1943. IDC-16. C</p> |
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| <p>1412 Description and tentative specifications for loading the motor of 4.5 BR ammunition. Sept. 8, 1942. IDC-18. Revision, Oct. 8, 1942. IDC-18.1. C</p> <p>1413 Description and tentative specifications for loading the motor of subcaliber mousetrap ammunition. Sept. 8, Oct. 5 and Oct. 7, 1942. IDC-16. C</p> <p>1414 Description and use of barrage rocket launcher (CIT type 2) for $\frac{1}{4}$-ton 4 x 4 truck. July 2, 1943. JEC-10. C</p> <p>1415 Description and use of the 5"0 high velocity aircraft rocket, models 13A and 14A; manual. Nov. 14, 1944. JBC-29. OSRD 2291. R</p> <p>1416 Description and use of the 11"75 aircraft rocket model 3, from F4U-1D aircraft with displacement launcher; manual. Dec. 15, 1944. JEC-21. OSRD 2313. C</p> <p>1417 Description of an igniter for mousetrap propellant. Aug. 10, 1942. ICC-1. C</p> <p>1418 Description of facilities at Eaton Canyon, by René Gorschalki. Nov. 1, 1945. JDC-82. OSRD 2537. R</p> <p>1419 Description of facilities at the China Lake Pilot Plant. Nov. 1, 1945. JDC-83. OSRD-2553. R</p> <p>1420 Description of some CIT projectiles; local intermediate report. May 19, 1943. IBC-27. C</p> <p>1421 Design and development of the 11.75 inch rocket motor, by C. W. Snyder. Nov. 6, 1945. IBC-75. R</p> | <p>1422 Design and development of the 11"75 rocket motor Mark 1; local intermediate report by C. W. Snyder, S. Rubin, L. H. Mahony, C. S. Cox and J. N. McClelland. Jan. 10, 1945. OBC-49.1. C</p> <p>1423 Design and performance of an installation for the temperature conditioning of motors for static firing, by B. H. Sage. June 1, 1945. JGC-9. OSRD 2501. R</p> <p>1425 Design of a cruciform charge for the 3"25 rocket motor, by B. H. Sage. July 19, 1943. JDC-46. C</p> <p>1426 Design of a CWR grain for the 3"25 Mk 5 motor, by Q. Elliott. Aug. 5, 1943. IDC-34. C</p> <p>1427 Design of a fast-burning propellant grain for the barrage rocket motor, by B. H. Sage. Mar. 30, 1943. JDC-41. C</p> <p>1428 Design of box grids; local intermediate report by S. Rubin. Nov. 6, 1942. JAC-4. C</p> <p>1429 Design of dies for the extrusion of solventless Ballistite, by B. H. Sage. May 29, 1943. JDC-44. C</p> <p>1430 Design of torpedo launching tube, by D. E. Hudson and O. D. Terrell. Mar. 14, 1945. NOC-32.1. C</p> <p>1431 The determination of a rocket trajectory, by C. F. Robinson, T. H. Pi and L. I. Epstein. July 23, 1945. IPC-79. C</p> <p>1432 Determination of depth of dive of aircraft torpedoes with the Foxboro depth and roll recorder Mk. 1, Mod. 2, by F. C. Lindvall. May 28, 1945. IOC-41. OSRD 2467. C</p> |
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| <p>1433 Determination of head malalignment of rocket projectiles; local intermediate report by J. G. Waugh. Apr. 10, 1943. IGC-5. C</p> <p>1434 Determination of ratio of effective burning time to reaction time from static burning curves, by Leon Blitzler. Sept. 10, 1945. OPC-15.2. C</p> <p>1435 Determination of sight settings. 3"5 and 5"0 aircraft rockets. Mk 4 and Mk 5 aircraft launchers. Mar. 20, 1944. UPC-2. OSRD 3502. R</p> <p>1436 Determination of sight settings. 3"5 and 5"0 aircraft rockets from zero-length launcher. Apr. 25, 1944. UPC-3. OSRD 3646. R</p> <p>1437 The determination of the angle of attack in a vertical plane, by Leverett Davis, jr. Oct. 30, 1944. OPC-24. Revision, Nov. 24, 1944. OPC-24.2. C</p> <p>1438 Determination of the geometrical malalignment of rocket projectiles, by T. Lauritsen, L. A. Richards, S. Rubin and J. G. Waugh. Jan. 28, 1943. JGC-5. C</p> <p>1439 The determination of the stability factor and the ratio of the moments of inertia of a spinner from yaw camera measurements, by Leverett Davis, jr. Feb. 26, 1945. OPC-30. C</p> <p>1440 Determination of the vertical deviation and relations between the various deviations; local intermediate report by Leverett Davis, jr. Mar. 18, 1943. IPC-21. C</p> <p>1441 The determination of underwater velocities and decelerations of torpedoes by the use of electrified nets, by William H. Christie and Harry N. Bane. Sept. 28, 1945. NOC-58.1. C</p> | <p>1442 Development of a hexaform Ballistite propellant grain for an 8-in. rocket motor, by B. H. Sage. Nov. 15, 1945. JDC-93. C</p> <p>1443 Development of a hexaform propellant grain for 3"25 rocket motors, by B. H. Sage. Feb. 1, 1946. IDC-44. C</p> <p>1444 Development of a jet-propulsion unit for the Mk 13 torpedo, by B. H. Sage. Sept. 12, 1945. JOC-4. OSRD 2539. C</p> <p>1445 Development of a photo-flare for torpedo launching investigations, by B. H. Sage. Dec. 1, 1945. JHC-8. C</p> <p>1446 Development of a propellant grain for use in a 2-inch reaction chamber, by B. H. Sage. Feb. 10, 1943. JDC-37. C</p> <p>1447 Development of a toroid igniter for application in the 3.25" spin-stabilized rocket motor, Mark 13, by B. H. Sage. Nov. 15, 1945. ICC-3. C</p> <p>1448 Development of a triform grain for 3.25-in. rocket motors, by B. H. Sage. Sept. 14, 1945. JDC-79. OSRD-2535. C</p> <p>1449 Development of a 24-lb. cruciform charge for the 5.0-in. rocket motor, by B. H. Sage. May 4, 1944. JDC-62. OSRD-2108. C</p> <p>1450 Development of cellulose acetate igniter cases for 1"25 and 2"25 rocket motors, by B. H. Sage. Aug. 12, 1943. JCC-8. C</p> <p>1451 Development of constant-burning-time 11"75 motor for use as booster, by C. W. Snyder. Sept. 17, 1945. OBC-49.1. R</p> |
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| <p>1452 Development of igniter for cage-mounted propellants; interim report by J. McMorris and Sylvan Rubin. Dec. 19, 1941. JCC-1. C</p> <p>1453 Development of new motor, by C. W. Snyder. Dec. 14, 1944. OBC-32.1. C</p> <p>1454 Development of separable motor for AS model bomb tests; local intermediate report by W. N. Arnquist. Apr. 28, 1942. IBC-4. C</p> <p>1455 Development of the Mk 13 cruciform propellant grain, by W. H. Corcoran. Dec. 29, 1943. JDC-56. OSRD 3492. C</p> <p>1456 Development of the 3"5 aircraft rocket, models 1, 5, and 14. June 1, 1944. JBC-26. OSRD 2107. C</p> <p>1457 Development of tin-plate case igniters for artillery rockets, by B. H. Sage. Dec. 30, 1945. JCC-12. C</p> <p>1457a Developments, projects and special problems; past, present and future. June 1943. IMC-2. C</p> <p>1458 The Didion-Bernoulli approximation for the trajectory of a projectile when the resistance is proportional to the square of the velocity, by Leverett Davis jr. Mar. 23, 1942. MTC-1. C</p> <p>1459 Diffusion of air in Ballistite, by B. H. Sage and W. N. Lacey. Feb. 10, 1942. JDC-6. C</p> <p>1460 Dispersed target method of determining barrage probabilities, by C. G. Willis and Gustaf Stromberg. Apr. 8, 1944. INC-4. C</p> | <p>1461 Dispersion and high temperature limit of the CWR-N; local intermediate report. Feb. 15, 1944. IBC-62. C</p> <p>1462 Dispersion due to malalignment of fin-stabilized rockets in forward firing from aircraft, by L. I. Epstein. Aug. 10, 1944. JPC-23. OSRD 2190. R</p> <p>1463 The dispersion of fin-stabilized rockets, by W. A. Fowler. Jan. 28, 1944. JPC-16. OSRD 3270. C</p> <p>1464 Dispersion of rockets. July 20, 1943. A-73M. OSRD 1632. C</p> <p>1465 Dispersion of rockets in forward firing from airplanes with reference to the CIT 3A12 and British UP 3 rockets; local intermediate report by Leon Blitzer. Aug. 25, 1943. IPC-39. C</p> <p>1466 Displacements of the 11"75 AR due to cross wind lift and Bernoulli effect, by P. W. Stoner and L. Davis, jr. June 20, 1945. OPC-3.1. C</p> <p>1467 The double diaphragm decelerometer; local intermediate report by R. Stokes. Dec. 20, 1943. IHC-11. C</p> <p>1468 Drag characteristics of various aircraft rocket projectiles; local intermediate report by Hsue-shen Tsien and Leverett Davis, jr. Jan. 15, 1944. IPC-52. C</p> <p>1469 Drawings for torpedo deceleration. June 29, 1944. JBC-28. C</p> <p>1470 [Drawings of Mark 5 aircraft float lights] April 17, 1943. C</p> |
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| <p>1471 [Drawings of rocket target launchers] Nov. 9, 1943. R</p> <p>1472 [Drawings of tank rocket launchers] 1943. UEC-2.2. C</p> <p>1473 [Drawings of vertical anti-submarine bombs] Apr. 17, 1943. C</p> <p>1474 Drop table and decelerometer: construction, calibration, and operation, by F. C. Lindvall. Nov. 15, 1943. JGC-7. C</p> <p>1476 Drying characteristics and the effect of water on the physical characteristics and ballistic performance of JPH and JPN propellants, by B. H. Sage. Nov. 15, 1945. JDC-90. C</p> <p>1477 DUKW projector tests at San Diego; field report by A. S. Gould and L. A. Richards. Mar. 28, 1943. NMC-1.74. C</p> <p>1478 Dynamic stability of bombs and projectiles, by M. A. Biot. Sept. 6, 1943. JPC-10. I. Forces on a solid moving through an ideal fluid. Jan. 2, 1943. JPC-4. II. Stability derivatives in a real fluid. Jan. 2, 1943. JPC-5. III. Stability of the rectilinear trajectory in air and water neglecting gravity. Jan. 2, 1943. JPC-6. IV. Stability of the vertical fall. May 26, 1943. JPC-11. C</p> <p>1479 The effect of acceleration, automatic sights, and head wind on the curve of approach and on the sight setting for the forward firing of rockets, by Leverett Davis, jr. [1944] OPC-21. A correction and an illustrative curve, by Leverett Davis, jr. and P. W. Stoner. Oct. 30, 1944. OPC-21.2. Revision, Nov. 24, 1944. OPC-21.3. C</p> | <p>1480 Effect of accuracy on the use of rockets. June 12, 1944. C</p> <p>1481 The effect of aerodynamic moments on the motion of spin-stabilized rockets during burning, by J. W. Follin, jr. Sept. 21, 1945. JPC-27. OSRD 2531. R</p> <p>1482 Effect of aluminum on burning properties of solventless Ballistite, by B. H. Sage. May 4, 1944. IDC-41. OSRD-2126. C</p> <p>1483 The effect of burning time, fin size and projector length on the accuracy of the 1800-ft/sec 2-in. AA; local intermediate report by Leon Blitz-er. Feb. 8, 1943. IBC-13. C</p> <p>1484 Effect of coloring agents upon the burning characteristics of Ballistite, by B. H. Sage. Oct. 1 and Dec. 11, 1942. IDC-9, JDC-25. Title varies. C</p> <p>1485 Effect of dimensions on performance of tubular grains for 2"25 rocket motors, by W. H. Corcoran. Jan. 27, 1944. JDC-59. OSRD 3634. C</p> <p>1486 Effect of extrusion conditions on the quality of solventless Ballistite, by B. H. Sage. Jan. 10, 1945. JDC-73. OSRD 2380. C</p> <p>1487 The effect of extrusion pressure on the degree of consolidation of JPN propellant, by B. H. Sage. Nov. 15, 1945. JDC-88. C</p> <p>1488 The effect of fin size, burning time, and projector length on the accuracy of rockets, by I. S. Bowen, L. Davis, jr. and L. Blitz-er. Jan. 4, 1943. JPC-3. C</p> |
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| <p>1526 Electrolytic integrating accelerometer, by William B. McLean. Feb. 14, 1946. OFC-6. C</p> <p>1527 Electronic bore-rider circuit, by U. E. Younger. Sept. 28, 1945. NOC-53.7. C</p> <p>1528 Elementary principles of rocketry, by O. C. Wilson. July 17, 1943. LBC-1. R</p> <p>1529 Elements in the effectiveness of anti-submarine attacks by surface craft, by N. A. Haskell, P. M. Hurley, G. Stromberg, M. Ward, C. G. Willis and L. B. Slichter. May 1944. JNC-14. OSRD 2189. C</p> <p>1530 Equipment and procedure for static firing tests; interim report by D. S. Clark. Mar. 21, 1942. JGC-2. C</p> <p>1531a Equipment and procedures used in the static firing of rocket motors at Eaton Canyon, by B. H. Sage. Mar. 1, 1946. IGC-11. C</p> <p>1532 Equipment for static firing tests, by E. L. Ellis and N. R. Gunderson. Nov. 12, 1942. JGC-3. C</p> <p>1533 Estimate of costs associated with experimental production work for the U. S. Navy. Oct. 10, 1942. C</p> <p>1534 Estimation of drag and nose-lift coefficients of some rockets necessary to give a prescribed underwater behavior; local intermediate report by Leverett Davis, jr. and L. Ivan Epstein. Apr. 10, 1944. IPC-57. C</p> <p>1535 Estimation of lot quality in sampling by attributes, by J. G. Waugh. Feb. 21, 1944. IMC-3. C</p> | <p>1536 Estimation of the inherent dispersion of rockets by firing pairs of rockets simultaneously, by J. G. Waugh. Oct. 11, 1943. IPC-43. C</p> <p>1537 Evaluation of pressure-time relationships occurring in static firing of rocket motors, by B. H. Sage. Apr. 10, 1945. JGC-8. OSRD 2484. C</p> <p>1538 Examination of rules for lead angles as affecting the efficiency of mousetrap attacks, by M. A. Biot. Apr. 8, 1943. INC-3. C</p> <p>1539 Excerpt B from CIT weekly progress report; torpedo launching. Dec. 12, 1943. PMC-2.10. C</p> <p>1540 Excerpt C from CIT weekly progress report [rockets and rocket propellants] Oct. 24-Dec. 19, 1943. Report nos. PMC 2.3-2.11. C</p> <p>1541 Excerpt from CIT weekly progress reports PMC-2.1, 2.2 and 2.4 on antisubmarine warfare. Oct. 10-31, 1943. Report nos. UMC-10.0, 10.1, 10.3. Title varies. C</p> <p>1542 Excerpts from CIT complete projectile catalog. Aug. 25, 1944. IBC-72. C</p> <p>1543 Experimental attempts to improve the accuracy of rockets: 1. Experiments to modify the internal structure of rocket motors. 2. Experiments with rotating rockets. 3. Miscellaneous experiments to modify standard projectiles, by O. C. Wilson and G. E. Kron. Nov. 26, 1943. JPC-9. C</p> <p>1544 Experimental measurement of yaw moment coefficient, by S. Rubin. Dec. 23, 1943. OPC-15. C</p> |
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| <p>1471 [Drawings of rocket target launchers] Nov. 9, 1943. R</p> <p>1472 [Drawings of tank rocket launchers] 1943. UEC-2.2. C</p> <p>1473 [Drawings of vertical anti-submarine bombs] Apr. 17, 1943. C</p> <p>1474 Drop table and decelerometer: construction, calibration, and operation, by F. C. Lindvall. Nov. 15, 1943. JGC-7. C</p> <p>1476 Drying characteristics and the effect of water on the physical characteristics and ballistic performance of JPH and JPN propellants, by B. H. Sage. Nov. 15, 1945. JDC-90. C</p> <p>1477 DUKW projector tests at San Diego; field report by A. S. Gould and L. A. Richards. Mar. 28, 1943. NMC-1.74. C</p> <p>1478 Dynamic stability of bombs and projectiles, by M. A. Biot. Sept. 6, 1943. JPC-10. I. Forces on a solid moving through an ideal fluid. Jan. 2, 1943. JPC-4. II. Stability derivatives in a real fluid. Jan. 2, 1943. JPC-5. III. Stability of the rectilinear trajectory in air and water neglecting gravity. Jan. 2, 1943. JPC-6. IV. Stability of the vertical fall. May 26, 1943. JPC-11. C</p> <p>1479 The effect of acceleration, automatic sights, and head wind on the curve of approach and on the sight setting for the forward firing of rockets, by Leverett Davis, jr. [1944] OPC-21. A correction and an illustrative curve, by Leverett Davis, jr. and P. W. Stoner. Oct. 30, 1944. OPC-21.2. Revision, Nov. 24, 1944. OPC-21.3. C</p> | <p>1480 Effect of accuracy on the use of rockets. June 12, 1944. C</p> <p>1481 The effect of aerodynamic moments on the motion of spin-stabilized rockets during burning, by J. W. Follin, jr. Sept. 21, 1945. JPC-27. OSRD 2531. R</p> <p>1482 Effect of aluminum on burning properties of solventless Ballistite, by B. H. Sage. May 4, 1944. IDC-41. OSRD-2126. C</p> <p>1483 The effect of burning time, fin size and projector length on the accuracy of the 1800-ft/sec 2-in. AA; local intermediate report by Leon Blitz-er. Feb. 8, 1943. IBC-13. C</p> <p>1484 Effect of coloring agents upon the burning characteristics of Ballistite, by B. H. Sage. Oct. 1 and Dec. 11, 1942. IDC-9 JDC-25. Title varies. C</p> <p>1485 Effect of dimensions on performance of tubular grains for 2"25 rocket motors, by W. H. Corcoran. Jan. 27, 1944. JDC-59. OSRD 3634. C</p> <p>1486 Effect of extrusion conditions on the quality of solventless Ballistite, by B. H. Sage. Jan. 10, 1945. JDC-73. OSRD 2380. C</p> <p>1487 The effect of extrusion pressure on the degree of consolidation of JPN propellant, by B. H. Sage. Nov. 15, 1945. JDC-88. C</p> <p>1488 The effect of fin size, burning time, and projector length on the accuracy of rockets, by I. S. Bowen, L. Davis, jr. and L. Blitz-er. Jan. 4, 1943. JPC-3. C</p> |
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| 1489 | The effect of fin size, burning time, and projector length on the accuracy of UP's; local intermediate report by I. S. Bowen. Nov. 13, 1942. IPC-10. C | 1498 | The effect of pitch and entry angle on the underwater orbit of Mark 13-2 torpedo as determined by tests with 1.0-in. model, by Max Mason and L. B. Slichter. Aug. 28, 1944. IOC-32. OSRD 2198. C |
| 1490 | Effect of fins on dispersion of 5"0 HVAR; local intermediate report by Leon Blitzer. May 16, 1944. OPC-18. C | 1499 | The effect of processing operations and of elevated temperatures upon the diphenylamine content of Ballistite, by L. Pauling and B. H. Sage. Sept. 29, 1944. JDC-66. OSRD 2298. C |
| 1491 | Effect of fins on the yaw and deflection of CWG's, by Leon Blitzer. June 1, 1942. MTC-5. C | 1500 | Effect of relative humidity on the water content of black powder, by B. H. Sage. May 5, 1943. JCC-7. C |
| 1492 | Effect of fins on yaw and deflection, by Leon Blitzer and Leverett Davis, jr. Aug. 10 and Oct. 31, 1942. MTC-7, ITC-5. Title varies. C | 1500a | The effect of roughness of sea on the entry angle of a projectile, by R. I. Piper. Aug. 19, 1944. IOC-31. R |
| 1493 | Effect of launcher length on the downward deflection of the trajectory of the 4"5 BR (4H-01 Ma, Lot 4) at end of burning, by J. G. Waugh. [194-] OPC-13. C | 1501 | The effect of roughness of the sea on the entry and ricochet angles of a projectile, by Max Mason and L. B. Slichter. Feb. 1, 1945. IOC-31, revised. OSRD 2374. C |
| 1494 | Effect of mal-launching on the accuracy of rockets (spinners); local intermediate report by L. Ivan Epstein. Jan. 13, 1944. IPC-53. C | 1502 | Effect of small changes in burning time and velocity on trajectory drops of rockets fired forward from aircraft, by L. Blitzer. Nov. 1, 1944. OPC-28. C |
| 1495 | Effect of nitrocellulose source upon the characteristics of double base powder, by B. H. Sage. Dec. 15, 1942 and Mar. 2, 1943. JDC-28, A-155. OSRD 1266. C | 1503 | Effect of squib boosters on the performance of black powder igniters, by B. H. Sage. Aug. 14, 1943. JCC-9. C |
| 1496 | Effect of nose shape on underwater trajectory of Mk 13-2 torpedo models, by Max Mason and L. B. Slichter. Dec. 22, 1944. IOC-39. OSRD-2326. C | 1504 | Effect of storage and weathering on ASPC rocket motors, by B. H. Sage. Sept. 23, 1943. JDC-50. C |
| 1497 | Effect of opacity on the burning characteristics of extruded Ballistite grains, by B. H. Sage. Apr. 21, 1944. JDC-61. OSRD 2134. C | 1504a | Effect of tail spin on underwater projectiles. by B. H. Sage. Jan. 10, 1942. IPC-2. C |

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| 1545 | Experimental production facilities at the Eaton Canyon Site. Nov. 24, 1942. IDC-22. C | 1554 | Extrusion and burning characteristics of powders of the dinitrotoluene and cordite types, by B. H. Sage. Mar. 12, 1943. A-71M. OSRD 1305. C |
| 1546 | Experimental values for rocket sight calibration for several aircraft; local intermediate report by O. D. Framp-ton. June 20, 1944. IPC-61. C | 1555 | Extrusion and burning characteristics of three types of modified Ballistite, by B. H. Sage. Mar. 11, Apr. 7 and May 18, 1943. JDC-40, 42, A-183. OSRD 1461. Title varies. C |
| 1546a | Explosives safety, by J. H. Maxson. Nov. 1, 1945. IZC-3. R | 1556 | Extrusion and burning characteristics of two types of colloidal propellant, by B. H. Sage. Jan. 12, 1943. JDC-35. C |
| 1547 | Explosives safety regulations. Feb. 15, 1945. CZC-1. OSRD 2395. C | 1557 | The extrusion of Ballistite dyed with nigrosine, by B. H. Sage. Jan. 21, 1943. JDC-34. C |
| 1548 | The exterior ballistics of fin-stabilized aircraft rockets, by L. Blitzler and L. Davis, jr. Aug. 20, 1945. JPC-24. OSRD 2528. R | 1558 | Extrusion of Ballistite tube from solventless sheet stock; second interim report by B. H. Sage and W. N. Lacey. Feb. 23, 1942. JDC-3.2. C |
| 1549 | External ballistics of 5" HVSR fired rearward from aircraft; field report by George Safonov. Jan. 10, 1945. OPC-15.1. C | 1561 | Extrusion of large tubular grains of Ballistite, by B. H. Sage. Dec. 1, 1942 and Jan. 4, 1943. JDC-24, A-135. OSRD 1183. C |
| 1550 | External ballistics of the 2"5 rocket grenade (300-ft/sec) based upon data for the 2"5 RG (350-ft/sec); local intermediate report. July 29, 1943. IBC-42. C | 1562 | Extrusion of multi-web grains of Ballistite, by B. H. Sage. Feb. 18, 1943. JDC-38. C |
| 1551 | Extrusion and burning characteristics of a double-base propellant employing ethyl centralite as stabilizer, by B. H. Sage. Nov. 23, 1942. JDC-26. C | 1564 | Extrusion of solventless Ballistite; intermediate report by T. Lauritsen. Dec. 3, 1941. IDC-1. C |
| 1552 | Extrusion and burning characteristics of a nitrotoluene propellant. Nov. 1942. ODC-10. C | 1565 | Extrusion of UP propellant; local intermediate report by T. Lauritsen. Dec. 11, 1941. IDC-1. Revision, Dec. 15, 1941. JDC-1. C |
| 1553 | Extrusion and burning characteristics of a special propellant, by B. H. Sage. Sept. 15, 1942. JDC-29. C | 1566 | Exudation of nitroglycerin from Ballistite propellant grains, by B. H. Sage. Sept. 8, 1945. JDC-78. OSRD 2532. C |

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| <p>1567 F4U-1, F4U-1D, FG-1. Sight settings for 2"25, 3"5, and 5"0 aircraft rockets. Nov. 14, 1944. UNC-4. OSRD 2271. R</p> <p>1568 F6F-3, F6F-5. Sight settings for 2"25, 3"5 and 5"0 aircraft rockets. Nov. 18, 1944. UNC-5. OSRD 2272. R</p> <p>1569 Feasibility of visual coincidence scoring by two observers of tracer bullets shot at rocket targets, by J. W. M. DuMond. May 1, 1942. JNC-3. C</p> <p>1570 Field standardization of the 2"5 subcaliber rocket (170-ft/sec ASPC); local intermediate reports. June 24 and Oct. 18, 1943. IBC-33, 34.2. Title varies. C</p> <p>1571 Field standardization of the 7"2 ASR; local intermediate report. July 11, 1943. IBC-37. C</p> <p>1572 Field standardization of the 7V11; local intermediate report. May 24, 1943. IBC-22.2. C</p> <p>1573 Field standardization of the 7V12; local intermediate report. May 24, 1943. IBC-29. C</p> <p>1574 Field standardization of the 7V13; local intermediate report. May 12, 1943. IBC-26. C</p> <p>1575 Field standardization of the 300-ft/sec subcaliber VAR; local intermediate reports. June 1943. IBC-34, 35. Title varies. C</p> <p>1576 Field standardization of the VFR-CIT 200-ft/sec; local intermediate report. Aug. 1, 1943. IBC-41. C</p> | <p>1577 [Field testing of rockets; range operations and metric photography] Progress reports by Jesse W. M. Dumond. Feb. 25-Apr. 6, 1942. NEC-1, 1.3-1.7. C</p> <p>1578 Field tests of the 3.25-in. rocket projectile (3A9); local intermediate report by C. W. Snyder. June 28, 1943. IBC-43. C</p> <p>1579 Figures selected from PBV of-ficers' manual. Jan. 18, 1943. JNC-4. R</p> <p>1580 Filing and indexing system for CIT files. Jan. 10, 1945. OZC-1.3. C</p> <p>1581 Filing and indexing system for Kellogg files. Mar. 5, 1943. OZC-1.2. C</p> <p>1582 Final report of the activities of Production Control Department [of Section 5] Vols. 1-7. Jan. 5, 1942-Oct. 15, 1945. R</p> <p>1583 Firing circuit for the rocket booster stations (schematic diagram TL 3025), by R. N. Skeeters. July 26, 1945. NOC-32.2. C</p> <p>1583a Firing depth tests of modified Mark 6 Mod. 1 depth charge pistols in Mark 9 depth charges, by B. H. Rule and W. P. Huntley. May 18, 1943. IOC-2. C</p> <p>1584 Firing of 3½" UP's at Eaton Canyon Site; report of field tests by W. A. Fowler. Oct. 28, 1941. IHC-1.1. C</p> <p>1585 Firing of 6" anti-submarine UP's at Eaton Canyon Site, by W. A. Fowler. Oct. 26, 1941. IHC-1.2. C</p> |
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- 1586 Firing tables for the 5"0/5 HCSR Model 134 from the Precise Mk 50 and Mk 51 Launchers, by P. W. Stoner and J. W. Follin, jr. Aug. 9, 1945. OPC-41.1. C
- 1586a Firing tests of ABN-7A magnetic fuze, by B. H. Rule and W. P. Huntley. [Dec. 31, 1942] IIC-5. C
- 1587 Firing tests of GMC sample of DUKW projector, by A. S. Gould. Mar. 28, 1943. NMC-1.74. C
- 1587a Firing tests of HHR fuse, by B. H. Rule and W. P. Huntley. [Nov. 25, 1942] IPC-15. C
- 1588 Firing tests on 15/16" extruded Ballistite; local intermediate report by W. H. Arnquist. Dec. 29, 1941. IGC-1.2. C
- 1589 Flare specifications, by A. K. Billmeyer. Sept. 30, 1945. NOC-17.1. C
- 1590 FM-2. Sight settings for 2"25, 3"5, and 5"0 aircraft rockets. Nov. 11, 1944. UNC-3. OSRD 2264. R
- 1591 Formulas for the spin produced by inclined jets; local intermediate report by Lev-erett Davis, jr. March 25, 1944. IPC-55. C
- 1592 Forward firing from aircraft; excerpts from CIT weekly progress reports. Oct. 3-Dec. 19, 1943. UMC 12.2-12.13. C
- 1593 Forward firing of 3"5 aircraft rockets from TBF-1 and PV-1 aircraft. Nov. 6, 1943. JNC-9.2. C
- 1594 Forward firing of 3"5 and 5"0 aircraft rockets from TBF-1, PV-1, SBD-5, and F6F-3 aircraft. Dec. 31, 1943. JNC-9.3. OSRD 3458. Supplement, Feb. 26, 1944. C
- 1595 Forward firing of 5"0, 3"5, and 2"25 aircraft rockets from A-26B aircraft. June 15 and July 15, 1945. JNC-27, 28. OSRD 2449, 2476. Title varies. R
- 1596 Forward firing of 11.75-inch aircraft rockets from A-26B aircraft. July 1, 1945. JNC-32. OSRD 2433. C
- 1597 Forward firing of 11"75 aircraft rockets from F4U-1D and F6F-5 aircraft. Jan. 27, 1945. JNC-29. OSRD 2357. Revisions 1-3. Apr. 28, July 2 and Aug. 15, 1945. C
- 1598 Forward firing of 11.75-inch aircraft rockets from P-38L aircraft. July 20, 1945. JNC-34. OSRD 2499. C
- 1599 Forward firing of rocket projectiles from British aircraft (abstracted from British reports). June 16, 1943. MBE-18x. C
- 1600 Forward firing of rockets from airplanes, by Leon Blitzler and J. C. Renard. June 6 and Oct. 4, 1943. OPC-5, JNC-9. Title varies. C
- 1601 Forward firing of rockets from P-47D aircraft. Jan. 2, Feb. 10 and 17, 1945. JNC-24-26. OSRD nos. 2333, 2347, 2382. Title varies. R
- 1602 Forward firing of the British UP3 and CIT 3A rockets from airplanes; local intermediate report by Leon Blitzler. July 24, 1943. IPC-34. C

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| <p>1603 The 4.5-in. barrage rocket, by F. Fredericks, T. Lauritsen, F. C. Lindvall, V. Rasmussen, L. A. Richards and J. G. Waugh. Aug. 26, 1942. A-85. OSRD 842. C</p> <p>1604 Fragmentation tests on special BR bodies; local intermediate report by O. C. Wilson, C. A. Wirtanen and J. A. Gilbert. Aug. 19, 1943. IQC-3. C</p> <p>1605 Free and restricted column behavior of some double-base propellants, by B. H. Sage. Dec. 30, 1945. JDC-92. C</p> <p>1606 Free-flight trajectories of CWG projectiles; local intermediate report by L. Blitzer. June 1, 1942. JPC-1. C</p> <p>1607 Further investigation of partially colloided double-base powder in solventless extrusion, by B. H. Sage. Aug. 16, 1944. JDC-65. OSRD-2205. C</p> <p>1608 Further investigations conducted with the yaw machine; local intermediate report. Jan. 4, 1943. ILC-2. C</p> <p>1609 Further investigations of the underwater behavior of aircraft rockets, by I. S. Bowen, R. V. Adams and S. Rubin. June 26, 1944. JBC-27. OSRD 2152. C</p> <p>1610 Fuzes for U. S. Navy 5"0 HVAR (excerpts from CIT fuze catalog). June 23, 1944. UIC-3. R</p> <p>1611 Gas malalignment and deflection-malalignment ratio for all types of BR fired from September 20, 1942 to April 1, 1943; local intermediate report by C. W. Snyder. IBC-23. C</p> | <p>1612 Geometric malalignment in rockets, by T. Lauritsen, L. A. Richards, S. Rubin and J. G. Waugh. Aug. 16, 1943. JGC-6. C</p> <p>1613 Graphic illustrations of landing operations assisted by barrage rockets. Mar. 20, 1943. UEC-2. C</p> <p>1614 Gravity drop tables. British 3"25 rocket motor no. 1 Mk 2 (11-lb cruciform) with American 3"5 and 5"0 bodies. May 25, 1944. UPC-4. OSRD 2112. R</p> <p>1615 Gravity drops (mils) normal to effective launching line, 2.25-in. AR model 1; Mk 5 launcher. July 15, 1944. OPC-23. R</p> <p>1616 Gunnery and tactical training with rocket targets, by J. Edson. Dec. 14, 1943. JNC-10. OSRD 3167. R</p> <p>1617 Gyroscopic orientation recorder, by S. Baker. Sept. 28, 1945. NOC-6.1. C</p> <p>1618 Handling of forward firing rocket equipment aboard carriers. Jan. 8, Feb. 26 and Mar. 28, 1944. JNC-13, 13.2. OSRD 3504. Title varies. C</p> <p>1619 Hazards in the shipment of propulsive and non-propulsive rockets. June 22, 1943. IMC-1. C</p> <p>1620 Heat transfer to nozzles used in jet propulsion equipment, by B. H. Sage. Sept. 30 and Oct. 20, 1942. JDC-20, A-56M. OSRD 951. C</p> <p>1622 High performance 2-in. APR; local intermediate report by F. E. Roach. Aug. 13, 1942. IAC-2. C</p> |
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| <p>1623 [High velocity rockets] Weekly progress report. Feb. 8, 1942. PMC-1.15. C</p> <p>1624 History of solventless extrusion of double-base propellant at the California Institute of Technology, by R. N. Wimpers. Mar. 1, 1945. IDC-43. C</p> <p>1625 Horn fuze tests, by W. P. Huntley, R. L. Noland, B. H. Rule and G. A. Spassky. July 8, 1943-June 17, 1944. IIC-16, 16.2-16.4. C</p> <p>1626 Hydrophone-signal amplifier for interval timer, by U. E. Younger. Sept. 25, 1945. NOC-42.1. C</p> <p>1627 Hydrostatic pressure test of "Y" and breech sections, by J. T. Bowen. July 19, 1945. NOC-35.1. C</p> <p>1628 Igniters. Mar., June and July 1943. C</p> <p>1629 Ignition of Ballistite during confined pressing operations, by B. H. Sage. Sept. 20, 1943. IDC-39. C</p> <p>1630 Ignition of the powder charge in an extrusion press, by B. H. Sage. May 5, 1943. IDC-33. C</p> <p>1631 Ignition within a twelve-inch vertical extrusion press. Nov. 24, 1944. JDC-71. OSRD 2348. C</p> <p>1631a IHR fuze tests, by B. H. Rule and W. P. Huntley. [Dec. 31, 1942] IIC-7. C</p> <p>1632 Impact and deceleration of the ASB (mousetrap), by Bruce H. Rule and W. P. Huntley. [194-] IPC-12. C</p> | <p>1633 Impact and deceleration of the ASPC Mark 1 projectile and modified A.S. bomb, by B. H. Rule and W. P. Huntley. Feb. 10, 1943. JBC-15. C</p> <p>1634 Impact characteristics of several double-base propellants, by B. H. Sage. Dec. 10, 1945. JDC-86. C</p> <p>1635 Impact decelerometers, by R. L. Noland, T. H. Wiancko, W. P. Huntley and B. H. Rule. Nov. 13, 1943 and Jan. 24, 1944. IHC-2, JHC-3. OSRD-3430. C</p> <p>1637 Index to CIT progress reports. Mar. 7, Aug. 22, 1943 and May 21, 1944. UMC-4, 4.2, 4.3. OSRD 3887. UMC-4.3 supplements 1-4, July 23, 1944-Sept. 15, 1945. OSRD-2543. C</p> <p>1638 The inertial forces on the parts of a mall launched rocket, by Leverett Davis, jr. Jan. 10, 1945. OPC-3. Corrections and extension, Jan. 23, 1945. C</p> <p>1638a Influence of additive agents upon the burning characteristics of extruded grains of double-base propellant, by P. A. Longwell, B. H. Sage and W. N. Lacey. June 15 and Nov. 17, 1942. IDC-13, 21. Title varies. C</p> <p>1639 Influence of burning time, mass velocity, and tube wall thickness on the heat failure of rocket tubes; local intermediate report. Jan. 20, 1943. IAC-6. C</p> <p>1640 The influence of extrusion and subsequent storage upon the burning characteristics of Ballistite, by B. H. Sage. June 1 and Sept. 21, 1942. JDC-15, A-96. OSRD 895. C</p> |
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| <p>1641 Influence of size of the axial perforation upon the performance of radial burning grains, by R. H. Sage. Sept. 21 and Oct. 22, 1942. A-106, IDC-20, JDC-19. OSRD 966. Title varies. C</p> <p>1642 The influence of temperature upon design and application of rocket motors. May 4, 1943. IAC-8. R</p> <p>1643 The influence of the Magnus moment on the stability of rotating projectiles, by L. Davis, jr. and J. W. Follin, jr. Sept. 1, 1945. JPC-29. OSRD 2529. R</p> <p>1644 Influence of tricresylphosphate upon the burning characteristics of extruded grains of Ballistite, by B. H. Sage. July 10, 1942. JDC-16. C</p> <p>1645 Initial conditions for the calculation of CWG trajectories, by Leverett Davis, jr. Mar. 21, 1942. MTC-2. C</p> <p>1646 Initial firing test of type 3 CIT sight; preliminary field report by H. W. Babcock. May 22, 1945. ORC-2.00 C</p> <p>1647 Inspection procedures for 2"25 aircraft rocket model 3 (subcaliber) (2"25 rocket motor Mk 12 and 2"25 body Mk 1); manual. May 30, 1944. JSC-6. OSRD 2119. R</p> <p>1648 Inspection procedures for 3"5 aircraft rocket model 5 (3"25 rocket motor Mk 7 and 3"5 rocket body Mk 1); manual. Apr. 29, 1944. JSC-5. OSRD-2110. R</p> <p>1649 Inspection procedures for 5"0 high velocity aircraft rocket, models 13, 14, 15, and 16 (5"0 rocket motor Mk 1 and 5"0 rocket body Mk 5); manual. Aug. 28, 1944. JSC-7. OSRD 2204. Supplement no. 1, Sept. 1944. OSRD 2234. R</p> | <p>1650 Inspection procedures for 5"0 spin-stabilized rockets; manual. Supplement no. 1 - Inspection of 5"0 rocket head Mk 8 (for 5"0/10 common spin-stabilized rocket, CIT model 32). Mar. 15, 1945. JSC-10. OSRD 2421. R</p> <p>1651 Inspection procedures for 5"0/5 high-capacity spin-stabilized rocket CIT model 34 (5"0 rocket motor Mk 4 and 5"0 rocket head Mk 10); manual. Jan. 15, 1945. JSC-10. OSRD 2383. C</p> <p>1652 Inspection procedures for 11"75 rocket motor Mk 1; manual. Nov. 22, 1944. JSC-9. OSRD 2311. C</p> <p>1653 Installation and use of barrage rocket projectors for tank lighters. May 28, 1943. JBC-16. C</p> <p>1654 Installation of BR projector; excerpts from report no. JBC 10.2. Sept. 18, 1942. JBC-10.3. R</p> <p>1655 Installation of projectors on PBV, by F. C. Lindvali. Sept. 5, 1942. OEC-13. C</p> <p>1656 Instruction manual. Optical inspection fixture, model M-4. 5"0 high velocity aircraft rocket. Oct. 2, 1944. JSC-8. OSRD 2236. R</p> <p>1657 Instructions and drawings for installation of Mk 5 Mod 1 launchers on P-47 aircraft. June 23, 1944. IEC-13. R</p> <p>1658 Instructions for use of CIT type 3 launcher (wooden 3-rail for 4"5 barrage rocket) and CIT type 3 firing box; manual. Nov. 17, 1943. JEC-9.3. R</p> |
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| 1659 Instruments developed for an experimental study of the water entry of torpedoes and full-scale torpedo models, by F. C. Lindvall. Apr. 10, 1945. JHC-6. OSRD 2431. C | 1669 Investigation of JPH propellant, lots FDAP 28 and FDAP 29, by M. O. Blatt, D. F. Botkin, Q. Elliott, B. H. Levedahl and L. S. Sinclair. June 5, 1945. JDC-74. OSRD-2517. C |
| 1660 Intensified exposure of motor seals, by B. H. Sage. July 21, 1945. JDC-76. OSRD-2519. C | 1670 An investigation of nickel-catalyzed powder, by B. H. Sage. Dec. 15, 1945. JDC-94. C |
| 1661 Internal and external ballistic data, fin-stabilized rockets. Mar. 15, 1945. UBC-28. OSRD 2409. C | 1671 Investigation of several types of German rocket motors, by B. H. Sage. Aug. 25, 1945. IAC-18. R |
| 1662 Internal ballistic calculations for four motors with neutral-burning grains; local intermediate report by C. T. Elvey. June 8, 1943. ILC-4. C | 1672 Investigation of stabilization of deflagration of tubular propellant, by B. H. Sage. Nov. 15, 1945. JDC-85. C |
| 1663 Internal ballistics of jet-propelled devices, by B. H. Sage. Oct. 23, 1942. JAC-2. C | 1673 An investigation of the dispersion of double-base powder in acetone-water mixtures, by B. H. Sage. Sept. 7, 1943. JDC-49. C |
| 1664 The internal ballistics of the 1-1/8 in. motor using (a) 97 grams of 1 1/2 in. propellant and (b) 97 grams of 1 1/2 in. propellant; local intermediate report by John McMorris. Aug. 20, 1942. IDC-12. C | 1674 Investigation of the effectiveness of flash protection afforded by process storage compartments, by B. H. Sage. July 10, 1943. IDC-32. C |
| 1665 Interpretation of range measurements with the Mule; local intermediate report by W. N. Arnquist. Feb. 5, 1942. IHC-1.3. C | 1676 Investigation of the use of plastic-case igniters for the ASPC motor, by B. H. Sage. Jan. 7, 1943. JCC-5. C |
| 1666 An introduction to the study of rockets, by O. C. Wilson and W. N. Lacey. Feb. 5, 1944. JMC-2. OSRD 3304. C | 1678 Investigations on the burning characteristics of propellant powder and their effects upon steady-state pressure in rocket motors, by B. H. Sage. Nov. 1, 1945. JDC-84. C |
| 1667 An introduction to the study of rockets. 2d ed., by O. C. Wilson and W. N. Lacey. Mar. 15, 1944. JMC-2.2. OSRD-3503. R | 1679 Land service use of 11.75-inch aircraft rockets against caves. Aug. 15, 1945. JBC-32. OSRD 2516. R |
| 1668 The investigation of a high-strength propellant, by B. H. Sage. Nov. 7, 1944. JDC-67. OSRD 2364. C | |

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| <p>1680 Loading of retro-bombing projectors for PBV-5 aircraft and preparation of 200-ft/sec ammunition; crew manual. Aug. 14, 1943. JEC-6.3. R</p> <p>1681 Loading of vertical bombing projectors for TBF-1 and TBF-2 aircraft and preparation of 300-ft/sec ammunition; crew manual. June 9, 1943. JEC-7. C</p> <p>1682 Loading of vertical bombing projectors (PBV-5) and preparation of ammunition. Jan. 6 and May 1, 1943. JEC-6, 6.2. Title varies. R</p> <p>1683 Mallaunching due to elliptical bourrelets, by W. B. Dayton. Oct. 10, 1945. OPC-15. R</p> <p>1684 Mallaunching of dynamically unbalanced rounds from rigid launchers, by W. B. Dayton. Dec. 9, 1944. OMC-13. C</p> <p>1685 Manual, description and instructions for use, CIT type 9 rocket launcher (extensible single rail 4"5 BR). May 5, 1944. JEC-16. OSRD 3719. R</p> <p>1686 Manual, description and instructions for use, CIT type 44 launcher for 5"0 SSR. Jan. 18, 1944. JEC-19. OSRD 2349. C</p> <p>1687 Manual for the computation of effective rocket temperatures, aircraft rockets with 3"25 motors, by L. Davis. June 10, 1944. UNC-1. OSRD-2118. R</p> <p>1688 Manual for the 4"5 barrage rocket (1100 yd). 2d ed. Oct. 10, 1943. JBC-19.2. R</p> | <p>1689 Manufacture and performance of grains for use in a 2.5-inch reaction chamber; local intermediate report by B. H. Sage. Apr. 10, 1943. IDC-29. C</p> <p>1690 Manufacturing and inspection problems, rocket target Mk 3; manual. Mar. 1, 1944. JSC-3. C</p> <p>1691 Manufacturing methods for 3"25 rocket motor Mk 7 and 3"5 rocket body Mk 1; manual. Jan. 20, 1944. JSC-2. C</p> <p>1691a Mark IX Mousetrap (proposed new ASPC); entry and underwater tests, by B. H. Rule and W. P. Huntley. [June 5, 1943] IPC-29. C</p> <p>1692 Mark 12 depth charge, by B. H. Rule and W. P. Huntley. Nov. 24, 1943 and Jan. 26, 1944. IOC-19, 21. Title varies. C</p> <p>1693 Mark 12 mine target impact tests, by B. H. Rule and W. P. Huntley. Sept. 4, 1943. IOC-10. C</p> <p>1694 Mark 25 depth mechanisms, FBD 1-25 and FJD 1-25, by D. A. Kunz. Apr. 2, 1945. NOC-5.4. C</p> <p>1695 Mark 25-00 assembly and structural tests, by D. A. Kunz. Mar. 29, 1945. NOC-5.3. C</p> <p>1695a Mark 138 fuze tests, by B. H. Rule and W. P. Huntley. June 8, 1943. IIC-15. C</p> <p>1696 The Mark 140 fuze (HIR 3): Tests of arming depth, premature firing, and sensitivity; local intermediate report. Sept. 1, 1943. IIC-18. C</p> |
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| <p>1697 Measurement of deceleration components; local intermediate report by R. Stokes. Dec. 20, 1943. IHC-4. C</p> <p>1698 The measurement of heats of explosion and combustion of Ballistite, by B. H. Sage. Aug. 10, 1944 and Jan. 13, 1945. JDC-69. OSRD 2458. C</p> <p>1698a Mechanical destruction tests of metal parts of subcaliber Mk 1 ASPC tail, by B. H. Sage. Apr. 20, 1943. IBC-24. C</p> <p>1699 Mechanism of pitch sensitivity for aircraft torpedoes, by Harold Wayland. Revision, Feb. 27, 1945. NOC-47.1. C</p> <p>1700 The mechanism of water entry of projectiles, by M. A. Biot. Sept. 1, 1943. JPC-13. C</p> <p>1701 The mercury decelerometer; local intermediate report by R. Stokes. Jan. 3, 1944. IHC-10. C</p> <p>1702 Metal-oxidant igniters for Ballistite, by B. H. Sage. Feb. 25, 1943. JCC-6. C</p> <p>1703 A method of analysis for gas-phase mixtures of acetone, water, and air, by B. H. Sage. Mar. 13, 1944. IDC-40. C</p> <p>1704 Method of changing a standardization report when the weight but not the shape of a rocket is changed, by Leverett Davis, jr. July 28, 1943. IPC-35. C</p> <p>1705 Method of computing ballistic data for rotating rockets. Jan. 18, 1944. OHC-8. C</p> <p>1706 Method of computing external ballistic data. Apr. 12, 1943. OHC-4. R</p> | <p>1707 Method of computing external ballistic data. Apr. 19, 1943. OHC-4.2. 2d ed., Sept. 30, 1943. OHC-4.3. C</p> <p>1708 Method of computing trajectories and sighting tables for forward firing aircraft rockets, by L. Blitzter and L. Davis, jr. Feb. 20, 1944. JPC-17. OSRD 3361. C</p> <p>1709 Methods for one piece nozzle manufacture. Mar. 8, 1944. JSC-4. Supplement no. 1, May 16, 1944. R</p> <p>1710 Methods of manufacture for the 4"5 barrage rocket; manual, by Lowell Martin. Sept. 22, 1943. JSC-1. C</p> <p>1711 Microscopic examination of extruded Ballistite, by William N. Lacey and B. H. Sage. Nov. 21, 1941 and Jan. 6, 1942. ODC-2, A-31M. OSRD-315 C</p> <p>1711a Minimum clearance angle for 5"0/5 HCSR, by Leverett Davis, jr. and J. W. Follin, jr. May 12, 1945. OPC-15.1. C</p> <p>1712 The Mk 2-0 D & R program (TLP 20); preliminary report by F. R. Watson, Harry Bane and Loren Barre. July 10, 1945. NOC-20.1. C</p> <p>1713 Mk 146 fuze (PIR): static firing progress report, by D. E. Brink. Mar. 18, 1944. IIC-21. C</p> <p>1714 Modeling of water entry of bombs and projectiles, by L. B. Slichter. Mar. 31, 1944. IHC-17. R</p> <p>1715 Motion of the 5"0 hybrid SSR in forward firing from aircraft as inferred from yaw camera records, by L. Ivan Epstein. Feb. 17, 1945. OPC-29. Supplements 1 and 2, Feb. 17 and May 26, 1945. Title varies. C</p> |
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| <p>1716 Motor catalog. Sept. 28, 1942-Feb. 10, 1943. UAC-1, 1.2, 1.3. Supplement, by C. T. Elvey. June 8, 1943. UAC-2. Title varies. C</p> <p>1717 Motor design, by F. E. Roach. Aug. 10, 1942. IBC-6. C</p> <p>1717a Motors for anti-submarine bombs, vertical bombs and barrage rockets, by W. A. Fowler. Oct. 22, 1942. IAC-3. C</p> <p>1718 Mousetrap operation instructions, by L. B. Slichter and T. Lauritsen. Oct. 25, 1942. JRC-13. C</p> <p>1719 The multi-unit indenter decelerometer; local intermediate report by R. Stokes. Jan. 3, 1944. IHC-8. C</p> <p>1720 Naval Ordnance Laboratory centrifuge checks of the calibration of the CIT midget step accelerometer, by O. D. Terrell. Mar. 15, 1945. NOC-3.1. R</p> <p>1721 The Navy type spring decelerometer; local intermediate report by R. Stokes. Jan. 3, 1944. IHC-7. C</p> <p>1722 Neon tube cameras, by Saul Baker. Oct. 15, 1945. NOC-61.1. C</p> <p>1723 Net data inconsistencies, by H. N. Bane. July 13, 1945. NOC-45.1. C</p> <p>1724 A new system of coordinates, by J. W. Follin, jr. Jan. 9, 1945. OPC-3.1. C</p> <p>1725 Note on range and dispersion of 5"0 HVAR model 13; local intermediate report by H. M. Greene and L. Davis, jr. Mar. 27, 1945. IBC-74. C</p> | <p>1726 A note on the reasons why the same spin stabilized rocket cannot be used both for very accurate fire with a flat trajectory and for barrage purposes, by Leverett Davis, jr. Apr. 4, 1945. OPC-33. C</p> <p>1727 Notes on CIT manual on rocket targets. June 18, 1943. OBC-27.1. C</p> <p>1728 Notes on meeting on production. Sept. 2, 1943. C</p> <p>1729 Notes on target fin construction, by W. D. Lacey. Oct. 9, 1943. IBC-50. C</p> <p>1730 Notes on the external ballistics of rotating rockets, by Leverett Davis, jr. Apr. 6, 1944. JPC-18. OSRD 3644. C</p> <p>1731 Nozzle erosion as a function of the physical properties of the material; local intermediate report. June 22, 1944. IAC-13. R</p> <p>1732 Nozzle erosion in the 3MR3 rocket motor determined from static firing records; local intermediate report by N. U. Mayall. Aug. 7, 1944. IAC-14. C</p> <p>1733 Observations on the water entry of a torpedo; local intermediate report by R. W. Ager. Nov. 23, 1943. IOC-14. C</p> <p>1734 On the computation of pressure-time curves; local intermediate report by C. T. Elvey. June 3, 1943. ILC-3. C</p> <p>1735 On the use of compressed gas for counterpoising mobile multiple rocket projectors, by Jesse W. M. DuMond. Feb. 24, 1942. IEC-2. C</p> |
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| 1736 $\frac{1}{2}$ scale model British projectile type "C", by B. H. Rule and W. P. Huntley. Nov. 1, 1943. IOC-12. C | 1746 Partially colloidized double-base powder manufactured by a solvent process, by B. H. Sage. Sept. 10, 1943. IDC-37. Revision, May 23, 1945. C |
| 1737 1" model test facilities, by B. H. Rule and R. C. Bradley. May 6, 1944. IHC-16. C | 1747 Performance characteristics of $2\frac{1}{2}$ -inch diameter underwater integral motor target bomb, by B. H. Rule. May 20, 1942. IPC-6. C |
| 1738 100-cycle timing oscillator, by U. E. Younger. June 28, 1945. NOC-53.3. R | 1747a Performance characteristics of 7-inch diameter underwater bombs at velocities up to 50-ft/sec, by B. H. Rule. May 15, 1942. IPC-3. C |
| 1739 The 100-knot vertical flare Mark 4, by John McMorris. Sept. 21, 1942. JBC-12. C | 1747b Performance characteristics of 8-inch diameter underwater bombs at velocities up to 50-ft/sec, by B. H. Rule. June 15, 1942. IPC-4. C |
| 1740 Operation of (1) midget neon lamps, (2) small B batteries, and (3) timing oscillators, by Udene E. Younger. Apr. 27, 1945. NOC-53.1. R | 1748 Performance of static firing equipment as influenced by the length of pressure line from Bourdon coil to test motor; local intermediate report by E. L. Ellis. Dec. 5, 1942. IGC-3. C |
| 1740a Optical method of measuring angular changes of model projectiles during entry phase; preliminary report by B. H. Rule. Jan. 22, 1945. IPC-69. C | 1749 Performance of the "fishtail" projector; local intermediate report by C. E. Weinland. June 1, 1943. IEC-7. C |
| 1742 Packing box projectors; local intermediate report by F. C. Lindvall, F. Fredericks and P. E. Lloyd. Dec. 17, 1942. IEC-4. C | 1750 Performance tests of modifications of $2\frac{1}{2}$ -inch diameter sub-calibre target bomb with ring tail assembly, by B. H. Rule. Sept. 2, 1942. IPC-6, Addendum 1. C |
| 1743 Pallet blade centering device, by R. R. Stokes. Feb. 26, 1945. NOC-4.2. C | 1751 Performance tests on electric squibs and rocket igniters after storage at elevated temperatures, by B. H. Sage. Oct. 16, 1943. JCC-10. OSRD 3050. C |
| 1744 Partial-burning equipment, by John McMorris and F. E. Roach. Nov. 3, 1942. JGC-4, OGC-15. C | 1752 Personnel organization. OSRD Physics 3. July 1943 and Jan. 1944. R |
| 1745 Partial burning of Ballistite tubes, by John McMorris. Dec. 12, 1941. JGC-1. C | |
| 1745a Partial burning of DBP sticks; local intermediate report by J. McMorris. Dec. 12, 1941. IDC-2. C | |

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| <p>1753 Photographic investigation of the reaction of rocket propellant grains; status report 3 by L. Green. Aug. 2, 1945. LP-200. C</p> <p>1754 Photographic measurements of Indianhead 4.5-in. rockets. Mar. 2, 1943. UFC-1. C</p> <p>1755 Photographic measurements of rocket flight, by D. Barrett, I. S. Bowen, F. F. Crandell, J. B. Edson and J. B. Irwin. June 1, 1942. JFC-1. C</p> <p>1757 Photographic methods for determining the performance of rockets fired in a forward direction from airplanes; local intermediate report by I. S. Bowen. Sept. 15, 1943. IFC-2. C</p> <p>1758 Photographic studies in underwater ballistics, by P. H. Hurley, J. S. Fassero and R. C. Jackson. Nov. 15, 1945. IPC-81. R</p> <p>1759 A pilot plant for the manufacture of double-base propellant by a modified solvent process, by B. H. Sage. Dec. 1, 1944. JDC-70. OSRD 2372. C</p> <p>1760 Pitch sensitivity of depth of dive for Mk 13-6 hot shots, by H. Wayland. May 28, 1945. NOC-47.2. C</p> <p>1761 Plastic subcaliber nozzle tests; local intermediate report by J. A. Gilbert. June 9, 1943. IAC-9. C</p> <p>1762 Preliminary calculations on the forward firing of SSR from airplanes, by Leverett Davis, jr. Oct. 17, 1944. OBC-41.4. C</p> <p>1763 Preliminary data 3"5 and 5"0 spin-stabilized rockets. Mar. 15, 1945. JBC-31. OSRD 2408. R</p> | <p>1764 Preliminary development work on the utilization of Western Cartridge small arms powder for rocket propellant, by B. H. Sage. Dec. 15, 1945. JDC-95. C</p> <p>1765 A preliminary investigation of plastic cases for igniters for Ballistite, by B. H. Sage. Sept. 15, 1942 and Jan. 18, 1943. Report nos. ICC-2, JCC-3, A-138. OSRD-1191. C</p> <p>1766 Preliminary report on the HIR Mk III fuze, by V. Rasmussen. Sept. 12, 1942. OIC-3. C</p> <p>1768 Preliminary sighting data for British aircraft rocket 3"25 motor with 11-lb cruciform grain, 62-lb body; also tubular grain. June 23, 1944. IPC-62. R</p> <p>1769 Preliminary sighting data for 5"0 high-velocity aircraft rocket. June 22, 1944. OBC-52. R</p> <p>1770 Preliminary standardization of the CWR-N; local intermediate report. Sept. 3, 1943. IBC-46. C</p> <p>1771 Preliminary standardization of the IRG; local intermediate report by J. McMorris. June 18, 1943. IBC-30. C</p> <p>1772 Preliminary standardization of the 3"5 AR (3A12); local intermediate report. Sept. 18, 1943. IBC-48. C</p> <p>1773 Preliminary studies of the ballistic behavior of 218B propellant, by B. H. Sage. Sept. 4, 1943. IDC-36. C</p> <p>1774 Preliminary test of "Y" and breech sections, by J. T. Bowen. June 8, 1945. NOC-35.2. C</p> |
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| <p>1775 Preliminary tests of 1" diameter model anti-submarine bombs and projectiles with bubble eliminating devices, by B. H. Rule and W. P. Huntley. Nov. 10, 1943. IPC-47. C</p> <p>1776 Preliminary tests of 1" diameter torpedo models, by B. H. Rule and W. P. Huntley. Nov. 26, 1943. IOC-16. C</p> <p>1777 Preliminary tests of 8" diameter model torpedoes; progress memorandum nos. 1-7 by B. H. Rule and W. P. Huntley. Oct. 30, 1943-Sept. 14, 1944. IOC 13.1-13.7. C</p> <p>1777a Preliminary tests of Mark 24 mine and proposed fuzes, by Max Mason. [Feb. 1943] IIC-10. C</p> <p>1779 Preparation of double-base propellant for solventless extrusion, by B. H. Sage. Mar. 1, 1943. JDC-39. C</p> <p>1780 Pressure build-up in partial burning tests; local intermediate report by John McMorris and W. N. Arnquist. Jan. 21, 1942. IDC-3. C</p> <p>1781 Pressure distribution along radial burning propellant grains, by B. H. Sage. Aug. 10, 1942. JDC-14. C</p> <p>1783 Principles appropriate to the revision of rocket propellant specifications. July 6, 1945. C</p> <p>1784 Principles of rocket firing from aircraft, illustrated. Apr. 2, 1945. JNC-30. OSRD-2428. R</p> <p>1785 Procedure in calculating "dispersions" and "probable errors", by W. A. Fowler. Mar. 20, 1943. IPC-19. C</p> | <p>1786 Procedure in calculating gas malalignment; local intermediate report by W. A. Fowler. Mar. 19, 1943. IPC-20. C</p> <p>1787 The production of instability by the Magnus moment; local intermediate report by Leverett Davis, jr. and J. W. Follin, jr. Apr. 3, 1945. IPC-75. C</p> <p>1788 Progress on the installation and training program for the antisubmarine bomb, or "mousetrap", by W. R. Smythe. Aug. 19, 1942. A-51M, OBC-15. OSRD 805. C</p> <p>1789 Project report, Section 5, by R. N. Batterson. Dec. 2, 1943. C</p> <p>1790 Project summaries for Div. 3: Special projectiles. Sept. 1, 1943. JMC-1. C</p> <p>1790a Projectile dolly for carrier use; local intermediate report by G. M. Mosteller. Mar. 14, 1944. IHC-15. C</p> <p>1792 A projector for target rockets; interim reports by W. R. Smythe. Jan. 15 and Feb. 24, 1942. JEC-1 and JEC-2. C</p> <p>1793 Projector for the 4½-inch barrage rocket. July 25, 1942. JEC-4. C</p> <p>1794 Proof-firing of rocket ammunition, 4"5 barrage rocket; manual by James D. DeSanto. Mar. 6, 1944. JHC-4. C</p> <p>1795 Proof test of PBY VB projector; local intermediate report by F. C. Lindvall. Dec. 14, 1942. IEC-3. C</p> <p>1796 Propellant grains for use in a 2.5-inch motor. Nov. 5, 1942. ODC-9. C</p> |
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| <p>1797 Propellant processing, igniter construction, and motor loading facilities, by B. H. Sage. Nov. 24, 1943. JDC-45. C</p> <p>1798 Propellants and igniters. Internal ballistics of rockets. Test methods and equipment: static; weekly and bi-weekly progress reports by B. H. Sage. Jan. 2, 1943-Sept. 15, 1945. Report nos. PMC-2.12-2.89 (Part 3). OSRD nos. 2102, 2115, 2122, 2129, 2138, 2143, 2149, 2156, 2164, 2170, 2179, 2184, 2194, 2201, 2209, 2215, 2220, 2230, 2239, 2246, 2251, 2259, 2267, 2278, 2287, 2294, 2301, 2308, 2317, 2323, 2330, 2336, 2342, 2353, 2361, 2369, 2377, 2386, 2392, 2398, 2403, 2412, 2418, 2425, 2436, 2443, 2453, 2462, 2471, 2479, 2488, 2495, 2507, 2512, 2522, 3092, 3146, 3189, 3223, 3250, 3279, 3305, 3326, 3381, 3392, 3468, 3472, 3493, 3518, 3528, 3571, 3610, 3638, 3649, 3684, 3708, 3737, 3765. C</p> <p>1799 Propeller fixity investigations, by Tom Curtis. Oct. 2, 1945. NOC-11.1. C</p> <p>1800 Proposed airplane rocket facilities at Naval Ordnance Test Station, Inyokern, by G. Mosteller. Mar. 8, 1944. OHC-9. R</p> <p>1801 Proposed design of rocket motor for Mk 13 torpedo, by B. H. Sage. Nov. 15, 1943. IAC-12. C</p> <p>1802 Proposed layout of facilities for Naval Ordnance Test Station, Inyokern, California. Nov. 12, 1943. IHC-3. C</p> <p>1803 Proposed vertical bombing projectors for PBV-5A, by F. C. Lindvall. Revised, Oct. 14, 1942. OEC-13.2. C</p> | <p>1804 Protective cage for afterbody of Mk 13-6 torpedo, by Max Mason and L. B. Slichter. Aug. 27, 1945. IOC-43. C</p> <p>1805 Qualitative discussion of equilibrium yaw, by S. Rubin. Dec. 22, 1943. OPC-15. C</p> <p>1806 Quality control department, its development and operation, by B. H. Sage. Oct. 30, 1945. ISC-4. R</p> <p>1807 Radius of curvature of the underwater trajectory of a rocket; local intermediate report by Leverett Davis, jr. Mar. 17, 1944. IPC-54. C</p> <p>1808 Range corrections for altitude and wind; local intermediate report by Leverett Davis, jr. and Sylvan Rubin. Oct. 9, 1943. IPC-42. C</p> <p>1809 Range of the 5" AR (JPN) model 5 and model 11 rockets when ground fired from the aircraft rocket launcher Mk 4; local intermediate report by J. G. Waugh and J. N. McClelland. Jan. 27, 1945. IBC-73. C</p> <p>1810 Range standardization of 4"5 barrage rocket (1100 yd); local intermediate report. July 9, 1943. IBC-36. C</p> <p>1811 Range tables for spin-stabilized rockets, by J. W. Follin, jr. and P. W. Stoner. Nov. 15, 1946. JPC-31. OSRD 2536. R</p> <p>1812 Range tables for the 5"0/2 HCSR, Model 151-A with 3.84 grain, by P. W. Stoner and J. W. Follin, jr. Aug. 17, 1945. OBC-41.2. C</p> <p>1813 Ranges and velocities as functions of projectile and propellant weights. June 1943. UPC-1. R</p> |
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- 1814 Rate of diffusion of nitro-glycerin through cellulose acetate, by B. H. Sage. Jan. 1, 1945. JDC-68. OSRD 2365. C
- 1815 Rearward firing of 5"0 HVSR from B-25H airplane; field report by G. Safonov and G. A. Kendall. Dec. 20, 1944. OBC-37.1. Correction and addition, Jan. 3, 1945. C
- 1816 Recorder settings and range errors for attacks with a-head-thrown weapons on deep targets, by M. A. Biot. Sept. 1, 1943. JPC-14. C
- 1817 The recording step decelerometer; local intermediate report by R. Stokes. Dec. 20, 1943. IHC-14. C
- 1818 Refractory linings for UP motors; local intermediate laboratory report by J. Mc-Morris. Feb. 13, 1942. IAC-1. C
- 1819 Regulated power supply circuit, by Udene Younger. May 22, 1945. NOC-53.2. R
- 1820 The relation of column strength to the ballistic performance of Mark 13 grains, by B. H. Sage. Dec. 15, 1945. JDC-87. C
- 1821 The relationship between dispersion in firing from a plane and from the ground, by I. S. Bowen. Dec. 25, 1942. TPC-2. C
- 1822 Relative yaws and deflections of UP's due to malalignment for neutral, regressive, and progressive burning, by Leverett Davis, jr. June 1, 1942. ITC-2. C
- 1823 Remarks on the use of double base powder in jet propelled devices, by C. C. Lauritsen. Feb. 23, 1942. A-40M. OSRD-404. 2d printing, Mar. 15, 1944. ODC-7. OSRD 3432. C
- 1824 Report as to utility of visual coincidence scoring by two observers of tracer bullets shot at rocket targets, by Jesse DuMond. Apr 29 and June 6, 1942. IEC-1, 1.2. Title varies. C
- 1824a Report on visit to Germany to obtain information on solid propellants for rockets, by Robert A. Cooley. Aug. 10, 1945. RDC-2. C
- 1825 Resistance of Ballistite grains to internal pressure, by B. H. Sage. Dec. 16, 1942. JDC-31. C
- 1826 Responses of the control surfaces of the Mk 13-2 torpedo; local intermediate report by R. W. Ager. Nov. 15, 1943. IOC-18. C
- 1827 Results of mallaunching calculations, by Leverett Davis, jr. and P. W. Stoner. Nov. 7, 1944. OBC-43.1. C
- 1828 Results of static firing tests on extruded propellant, by W. N. Arnquist. Jan. 19 and 22, 1942. IGC-1.3, 1.4. C
- 1829 Results of tests on carbon strain gages, by Udene E. Younger. Dec. 11, 1943. NOC-53.4. R
- 1830 Resumé of activities and proposal for further work in the Propellant Section, by B. H. Sage and W. N. Lacey. Feb. 21-Aug. 23, 1942. Report nos. NDC 15, 1.40-1.43. Title varies. C
- 1831 Resumé of visit to the Sunflower Ordnance Works, Lawrence, Kansas, by W. H. Corcoran. Nov. 2, 1944. DDC-1. C
- 1832 Retro-bombing: a description of projectiles and installations on aircraft. June 23, 1943. JBC-18. C

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| <p>1861 Scoring registers for target practice with automatic weapons; interim report by James B. Edson. Feb. 20, 1942. JNC-1. C</p> <p>1862 7"2 demolition rocket, description and use. Feb. 10, 1944. JBC-24. OSRD 3301. C</p> <p>1863 Shearing stress on projectiles at water impact, by Max Mason and L. B. Slichter. Apr. 14, 1945. IPC-74. OSRD 2483. C</p> <p>1864 The shock mounted CIT step accelerometer applied to the study of impulsive velocity changes associated with the high speed water entry of aircraft torpedoes, by O. D. Terrell. Aug. 10, 1945. NOC-3.3. C</p> <p>1865 Short description of service rockets. Apr. 15, 1944. UBC-18. OSRD 3635. C</p> <p>1866 A short description of the yaw machine. Nov. 17, 1943. OGC-24. C</p> <p>1867 Short duration acceleration tests of the CIT midjet step accelerometer, by O. D. Terrell. May 1, 1945. NOC-3.2. R</p> <p>1868 Shroud ring Mk 1 Mod 0 as applied to the Mk 13 type torpedo; instruction pamphlet. June 26, 1944. IOC-29. R</p> <p>1870 Sighting and trajectory drop tables for 2"25 aircraft rockets. Aug. 5, 1944. IBC-70. OSRD 2174. R</p> <p>1871 Single shroud rocket tail with internal insulated firing ring, by L. A. Richards. Jan. 22, 1943. IBC-11. C</p> | <p>1872 Sinking velocity and forward travel of British type "C" projectile, by Max Mason and L. B. Slichter. Oct. 12, 1944. IOC-28.3. C</p> <p>1873 SIR fuze tests; local intermediate report by N. Gunderson, D. E. Brink, C. F. Robinson, V. Rasmussen and R. B. King. Jan. 15, 1943. IIC-9. C</p> <p>1874 The 6-inch rocket motor, by Earl Thomas. Nov. 9, 1942. JAC-3. C</p> <p>1875 Six inch scatter bomb; tests of preliminary design shapes, by B. H. Rule and W. P. Huntley. [Jan. 12, 1943] IBC-12. C</p> <p>1876 Slat deck impact deceleration tests, ASPC Mark 1, by B. H. Rule and W. P. Huntley. July 12, 1943. IOC-5. C</p> <p>1877 Smoke float rocket, by S. Rubin. Nov. 24, 1943. IBC-54. OSRD 3073. C</p> <p>1878 Smoke tracers for UP's; local intermediate report by J. McMorris. Feb. 14, 1942. IKC-1. C</p> <p>1879 Soft metal wires in shear as delay elements for time fuzes, by J. McMorris. July 12, 1943. IIC-17. C</p> <p>1880 The solar yaw camera, by W. R. Smythe. May 8, 1945. JFC-2. OSRD 2190A. R</p> |
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- 1881 Some calculations and experimental measurements upon the pressure distribution around thin-webbed charges during firing, by R. N. Wimpres, G. W. Miller, B. H. Sage and W. N. Lacey. Apr. 8, 1942. IDC-10. C
- 1882 Some effects of radiation upon double-base powder. June 15 and Aug. 4, 1942. JDC-11, A-79. OSRD 798. C
- 1883 Some factors entering into the design of high performance rockets; local intermediate report by E. Ellis and F. Roach. Jan. 10, 1943. IAC-5. C
- 1884 Some operational and logistical problems in the use of rockets, by William A. Fowler. Feb. 1, 1945. JNC-16. OSRD 2366. C
- 1885 Some physical properties of Ballistite; interim report by B. H. Sage and W. N. Lacey. Dec. 27, 1941. JDC-2. C
- 1887 Some physical properties of double-base powders, by B. H. Sage. Oct. 12, 1943. JDC-51. OSRD 3203. C
- 1888 Some properties of solventless Ballistite, by B. H. Sage. Dec. 1, 1942. JDC-30. C
- 1889 Some Schlieren photographs of rocket jets, by N. U. Mayall. Sept. 25, 1945. JGC-10. OSRD 2538. C
- 1891 Some studies of the physical properties of Ballistite, by D. S. Clark. Feb. 11, 1943. JDC-36. C
- 1892 Sound ranging facilities and procedures at the C.I.T. torpedo launching range; local intermediate report by F. R. Watson. May 15, 1944. IHC-18. C
- 1893 Sources of error and dispersion in forward firing of non-rotating aircraft rockets, by L. Blitzler and L. Davis, jr. Apr. 25, 1944. JPC-19. OSRD 3690. R
- 1894 Special underwater tests (Morris Dam) on fuzes and projectiles; weekly progress reports by B. H. Rule, Max Mason and L. B. Slichter. Dec. 26, 1943-Jan. 21, 1945. Report nos. PMC 2.12, 2.16-2.18, 2.22, 2.24, 2.25, 2.30, 2.31, 2.37, 2.38, 2.42, 2.46, 2.49, 2.52, 2.56, 2.60, 2.68 (Part 6). OSRD nos. 2125, 2132, 2159, 2187, 2212, 2233, 2262, 2297, 2356, 3095, 3253, 3276, 3308, 3471, 3496, 3531, 3647, 3687. C
- 1895 Specification for standard assembly 5"0 rocket motor (5MR5), by M. C. Pond. Dec. 19, 1944 and May 29, 1945. IAC-15, 17. Title varies. C
- 1895a Specifications for propellant of mousetrap ammunition. Aug. 19, 1942. IDC-15. C
- 1896 Specifications for standard assembly, 5"0 rocket motor Mk 6 Mod 2, by M. C. Pond. May 15, 1945. IAC-16. R
- 1897 Spinner theory: Qualitative notes, part I; local intermediate report by Leverett Davis, jr. Dec. 18, 1943. IPC-50. C
- 1898 Spontaneous decomposition of a Ballistite grain, by B. H. Sage. Nov. 20, 1943. JDC-54. OSRD 3234. C

- | | |
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| <p>1899 The stability factor deduced from the yaw camera record and the effect on it of the Magnus moment, by P. W. Stoner and Leverett Davis, jr. Apr. 14, 1945. OPC-32. C</p> <p>1900 The stability factors and equilibrium yaws of a number of SSR; preliminary report by Leverett Davis, jr. and L. I. Epstein. Feb. 12, 1945. OPC-15. C</p> <p>1901 Stabilization of reaction of tubular propellant grains by the use of longitudinal ridges in the central perforations, by B. H. Sage. May 19, 1945. JDC-75. OSRD-2541. C</p> <p>1902 Standardization of aircraft metric photography technique, using F-46 torpedo camera, by R. V. Adams. Apr. 14, 1945. OEA-1. R</p> <p>1903 Standardization of projectiles on basis of field tests, by J. Foladare. Apr. 1, 1943. OBC-33. C</p> <p>1903a Standardization of 7V7 motor. Jan. 10, 1943. NMC-1.63. C</p> <p>1903b Standardization of the CWB motor. Dec. 13, 1942. NMC-1.39. C</p> <p>1904 Standardization of the CWR-N; local intermediate report. Oct. 12, 1943. IBC-46.2. C</p> <p>1905 Standardization of 3.25-in. OD motors using 3.5 lb of propellant; local intermediate report. Mar. 8, 1943. IAC-7. C</p> | <p>1905a Standardization tests of CIT type 3 launcher (wooden 3-rail for 4"5 BR), by P. E. Lloyd. Aug. 7, 1943. IEC-9. C</p> <p>1906 Static and field standardization of the 3"5 AR Model 1; local intermediate reports. Oct. 9, 1943 and Jan. 5, 1944. IBC-52, 58. Title varies. C</p> <p>1907 Static and field standardization of the 5"0 AR Model 107; local intermediate report. Jan. 5, 1944. IBC-59. C</p> <p>1908 Static and field standardization of the 7"2 demolition rocket. Feb. 1, 1944. IBC-61. C</p> <p>1909 Static and field standardization of the short-burning 250-yd 4"5 BR; local intermediate reports. July 31 and Aug. 8, 1943. IBC-38, 40. Title varies. C</p> <p>1910 Static firing tests; local intermediate report by W. N. Arnquist. Dec. 24, 1941. IGC-1.1. C</p> <p>1911 Static firing tests for UP section, by W. A. Fowler and W. N. Arnquist. Nov. 7 and Dec. 4, 1941. OGC-10. C</p> <p>1912 Static firing tests on 15/16" extruded propellant, by W. N. Arnquist. Dec. 8, 10 and 12, 1941. OGC-10. C</p> <p>1913 Static firing tests on large diameter grains of extruded Ballistite, by B. H. Sage. July 30, 1942. JDC-12. C</p> |
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| 1914 Static tests of 15/16" OD, $\frac{1}{4}$ " ID extruded propellant, by W. A. Fowler and W. N. Arnquist. Nov. 25, 1941. C | 1926 Status of high altitude rocket work at CIT, by W. A. Fowler. June 8, 1942. IBC-5. C |
| 1915 Static tests of the 3MR12 motor mounted for rotation; local intermediate report by N. U. Mayall. May 28, 1944. IBC-66. C | 1927 Status of HIR-2 fuze, by T. Lauritsen. July 3, 1942. OIC-1. C |
| 1916 Status of 2-inch armor-piercing rocket, by F. Roach. July 1, 1942. OBC-8. C | 1928 Status of propellant supplies of OEMsr-418, by B. H. Sage. Jan. 22, 1944. R |
| 1917 Status of 3-inch AA, by F. Roach. Sept. 15, 1942. OBC-16. R | 1929 Status of rocket target, by J. Edson. July 1, 1942. OBC-9. C |
| 1918 Status of 3-in. AA, by F. Roach. Oct. 1, 1942. OBC-16.1. C | 1930 Status of sub-caliber anti-submarine bomb, by O. C. Wilson. July 1, 1942. OBC-5. C |
| 1919 Status of 5"0 HVAR (5"0 motor); local intermediate report by C. W. Snyder. Apr. 1, 1944. IBC-64. C | 1932 Status of the CWB, by R. B. King. July 1, 1942. OBC-10. C |
| 1920 Status of 6-inch Mule, by T. Lauritsen. July 3, 1942. OBC-13. C | 1933 Status of vertical flare bomb, by J. McMorris. July 1, 1942. OBC-6. C |
| 1921 Status of 7V11; preliminary standardization tests. Apr. 14, 1943. IBC-22. C | 1934 Status report on publications, by Joseph Foladare. Oct. 14, 20 and Nov. 11, 1943. Report nos. OZC 10.16-10.18. C |
| 1922 Status of 12"0 aircraft rocket, by S. Rubin. June 2, 1944. IBC-67. C | 1935 Status report on smoke float rockets; local intermediate report by S. Rubin. June 7, 1943. IBC-32. C |
| 1923 Status of 16-channel CWB projector; local intermediate report by F. C. Lindvall. Jan. 9, 1943. IEC-5. C | 1936 Steady state running attitude and depth rudder position for the Mk 13 torpedo, by J. H. Carr and R. W. Haussler. Oct. 1, 1945. NOC-60.1. C |
| 1924 Status of beach barrage rocket, by W. A. Fowler. July 1, 1942. OBC-12. C | 1937 Stresses in catapults for launching projectile models, by L. B. Slichter and J. G. Wandel. Sept. 12, 1945. IEC-16. R |
| 1925 Status of chemical warfare grenade, by O. C. Wilson and S. Rubin. July 1, 1942. OBC-4. C | |

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| <p>1938 Structural damage associated with water entry of projectiles, by D. E. Hudson. Feb. 15, 1945. JOC-3. OSRD 2381. C</p> <p>1939 Structural damage report on Mk 25-00 #5, by W. H. Saylor and D. A. Kunz. Mar. 7, 1945. NOC-5.1. C</p> <p>1940 Structural tests--Mk 25-00 free wheeling propeller assembly unit #1, by D. A. Kunz. Aug 6 and 20, 1945. NOC-5.10, 5.11. Title varies. C</p> <p>1941 Structural tests--Mk 25-00 propeller assembly, by D. A. Kunz. June 28, 1945. NOC-5.9. C</p> <p>1942 Structural tests--176-L cast aluminum afterbody with cast aluminum shroud ring, by D. A. Kunz. Mar. 15, Apr. 18 and May 29, 1945. Report nos. NOC-5.2, 5.5, 5.8. Title varies. C</p> <p>1943 A study of certain hazards involved in the loading and assembly of rocket motors, by A. D. Ayers. July 15, 1943. IDC-35, JDC-48. C</p> <p>1944 Study of methods for evaluating quality of solventless extruded Ballistite, by B. H. Sage. Oct. 12, 1943. JDC-52. OSRD 3439. C</p> <p>1945 A study of nozzle erosion; local intermediate report. Mar. 8, 1944. IGC-7. C</p> <p>1946 Study of nozzle side forces by means of compressed air jet; local intermediate report by G. E. Kron and O. C. Wilson. Dec. 15, 1942. ILC-1. C</p> <p>1947 Study of partial burnings of Mk 6, Mk 7 and Mk 8 grains, by C. T. Elvey, C. D. Swanson and C. E. Duemler. July 25, 1944. IDC-42. C</p> | <p>1948 A study of the uniformity of burning characteristics of tubes extruded from solventless Ballistite; interim report by B. H. Sage, D. S. Clark and W. N. Lacey. Mar. 2, 1942. JDC-9. C</p> <p>1948a A study of the uniformity of deflagrating characteristics of extruded solventless sheet Ballistite; interim report by B. H. Sage and W. N. Lacey. Feb. 20, 1942. IDC-6. C</p> <p>1949 Study of velocity measurements, by Udele E. Younger. Sept. 21, 1945. NOC-50.1. C</p> <p>1950 Style guide for authors of monographs. Sept. 4, 1945. IZC-1 (revised). R</p> <p>1951 Style guide for editors and printers of monographs. Nov. 8, 1945. IZC-2. Supplements 1 and 2, Dec. 17 and 21, 1945. IZC-2.1, 2.2. R</p> <p>1952 Style manual for reports published by the Editorial Department. Nov. 29, 1943. IZC-1. C</p> <p>1953 A suggested method of scoring to increase the marksmanship of anti-aircraft gun crews and to decrease the necessary training period, by Alex E. S. Green. May 1, 1942. ONC-1. C</p> <p>1954 Summary of activities for Section 5, by R. Neal Batterson. Dec. 2, 1943-Oct. 1, 1945. C</p> <p>1955 Summary of comparative tests of the rocket sight (aircraft) Mark 1 (CIT AR Sight) and a fixed sight in the firing of aircraft rockets, by O. D. Frampton. Mar. 8, 1945. ORC-1.42. C</p> |
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| 1956 Summary of information to date on Mk 13-2, 176 and Westinghouse joints, by D. A. Kunz. May 8, 1945. NOC-5.6.
C | 1965 The temperature of spontaneous ignition of several samples of American Ballistite, by P. A. Longwell, B. H. Sage and W. N. Lacey. Apr. 2, 1942. JDC-8. C |
| 1957 Summary of project Camel activities for Section 5, by R. N. Batterson. Aug. 11 and Sept. 21, 1945. C | 1966 Tentative inspection procedures for extruded Ballistite grains, by B. H. Sage. Aug. 25, 1943. IGC-6. C |
| 1958 Summary of structural tests to date on cast aluminum afterbodies for the Mk 25 torpedo, by D. A. Kunz. May 8, 1945. NOC-5.7. C | 1967 Tentative values for the stability factor and equilibrium yaw of the 5"0/1 HCSR Model 50; preliminary report by L. I. Epstein. Apr. 30, 1945. OPC-15.1. R |
| 1959 Summary of underwater performance data for ASPC Mk 1, by Max Mason. [Feb. 1943] IPC-18. C | 1968 Tentative values for the stability factor and equilibrium yaw of the 5"0/2 HCSR Model 51; preliminary report by L. I. Epstein. May 26, 1945. OPC-15.1. C |
| 1959a Survey of yaw machine data, by G. E. Kron, L. Blitzler, S. Rubin and O. C. Wilson. July 19, 1942. NMC-1.38. C | 1969 Terminal ballistics of spin-stabilized rockets, by Leverett Davis, jr. June 19, 1945. OPC-15.1. R |
| 1960 A system of notation for use in treatments of exterior ballistics of rockets. July 13, 1945. OZC-23. C | 1970 Terminal ballistics of spin-stabilized rockets; local intermediate report by Leverett Davis, jr. Aug. 3, 1945. IQC-4. C |
| 1961 Target launchers. Dec. 10, 1943. JNC-10 appendix no. 2. C | 1971 Test facilities and acoustic range at Morris Dam, by B. H. Rule. Oct. 15, 1942. JHC-1. C |
| 1962 [Target rockets] Weekly progress reports. Nov. 8-Dec. 14, 1941. Report nos. PMC 1.2-1.5, 1.7. C | 1972 Test facilities and acoustic range at Morris Dam, by B. H. Rule. Nov. 23, 1942. A-118. OSRD 1082. R |
| 1963 TBM-1, TBF-1, sight settings for 2"25, 3"5 and 5"0 aircraft rockets. Nov. 28 and Dec. 1, 1944. UNC-6,7. OSRD 2273, 2274. Title varies. R | 1973 A test of modeling of the underwater trajectory of cone-nosed cylinders 1/8 inch to 5 inches in diameter, by Max Mason and L. B. Slichter. Apr. 2, 1945. IOC-38. OSRD-2468. C |
| 1964 Temperature gradient in the tubing of the 3"25 rocket motor Mk 7; local intermediate report by F. E. Roach, J. M. Schmidt and W. F. Nash, jr. May 22, 1944. ILC-5. C | |

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| <p>1974 Test of significance of differences in deviation in deflection and deviation in range of rockets; local intermediate report by J. G. Waugh. June 19, 1944. IPC-60. R</p> <p>1975 Test of significance of differences in mean deviations from the centroid of rocket groups, by P. H. Taylor. OPC-15.1. C</p> <p>1975a Test of subcaliber ASB projector at MAAR; field report by O. C. Wilson and C. H. Wilts. July 12, 1942. NMC-1.37. C</p> <p>1976 Test of type 3 CIT AR Sight; field report by O. D. Framp-ton. May 28, 1945. ORC-1.53. C</p> <p>1977 Testing of cruciform grains from consolidated ball powder; status report 1 by Q. Elliott. Nov. 8, 1944. R</p> <p>1978 Testing of quality of extruded grains received from Bruceton, by R. N. Wimpres. Apr. 6, 1943. IDC-28. C</p> <p>1979 Testing of quality of small grains of extruded Ballis-tite, by B. H. Sage. Aug. 20 and Sept. 19, 1942. JDC-17, A-94. OSRD 896. Title varies. C</p> <p>1979a Testing of quality of solvent extruded powder, by B. H. Sage. Feb. 5, 1943. IDC-26. C</p> <p>1980 Tests of double-ended rock-et motors at Goldstone; lo-cal intermediate report by O. C. Wilson. Aug. 5, 1943. IAC-11. C</p> <p>1981 Tests of fast-burning BR with AIR 2 fuze; local intermedi-ate report by C. W. Snyder and V. Rasmussen. Feb. 26, 1943. IBC-17. C</p> | <p>1981a Tests of heavy POD dummy rug-ged model, by B. H. Rule and W. P. Huntley. Oct. 4, 1944. IOC-36. C</p> <p>1981b Tests of jiggle switch fuze in Mark 24 mine. Apr. 24, 1943. IPC-24. C</p> <p>1982 Tests of lateral dispersion of BR with various nozzles; local intermediate reports by L. A. Richards and J. G. Waugh. Jan. 14 and Feb. 5, 1943. IBC-14. 19. C</p> <p>1983 Tests of preliminary firing mechanisms for SIR fuze, by B. H. Rule and W. P. Huntley. Jan. 1943. IIC-8. C</p> <p>1984 Tests of production samples of Mark #31, Mod. 1 fuses, by B. H. Rule and W. P. Huntley. [Feb. 1943] IIC-11. C</p> <p>1985 Tests of significance of means; local intermediate re-port by W. G. Waugh. Jan. 27, 1945. IPC-68. C</p> <p>1986 Tests of SIR (Mark 139) fuze; local intermediate report. Apr. 27, 1943. IIC-11. C</p> <p>1987 Tests of the vertical bombing of submarines, by W. N. Arn-quist. C. D. Anderson and F. C. Lindvall. Sept. 7 and 29, 1942. A-52M. 54M. OSRD 872, 911. Title varies. C</p> <p>1988 Tests on nozzle performance with the "mule", by W. N. Arnquist. Mar. 11, 1942. IHC-1.4. C</p> <p>1990 A theoretical analysis of the results of the field firing of dynamically unbalanced 3"5 SSR Model 123, by J. W. Fol-lin. Dec. 22, 1944. OPC-15.1. C</p> |
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| <p>1991 Theoretical curves showing yaw, orientation and deflection of 3"5 SSR, 5"0 HVSR during burning, by L. I. Epstein. Dec. 30, 1944. JPC-20 supplement. C</p> <p>1992 The theoretical determination of the effective rocket temperature for the 3"25 Mk 7 motor when Newton's law of cooling holds, by L. Davis, jr. May 22, 1944. IPC-59. OSRD 3878. C</p> <p>1993 Theoretical trajectories for a projectile resembling the 5 in. rocket, by Leverett Davis, jr. [Nov. 1943] IPC-48. C</p> <p>1994 A theory for the difference between the true angle of attack and the effective angle of attack, by Leverett Davis, jr. Sept. 28, 1945. JPC-30. OSRD 2527. R</p> <p>1995 Theory of errors in anti-submarine attacks by surface vessels, by N. A. Haskell. Mar. 16, 1944. JNC-15. C</p> <p>1996 Theory of the oil line with applications to the interpretation of pressure-time recordings, by Bart Locanthi and Dorothy D. Locanthi. Jan. 25, 1945. IGC-8. C</p> <p>1997 The theory of the variation with temperature of the dispersion of the CWG, by Leverett Davis, jr. May 1, 1942. MTC-4. C</p> <p>1998 Thermodynamic properties of products of reaction of Ballistite; intermediate report by B. H. Sage and W. N. Lacey. Feb. 4, 1942. JDC-4. C</p> <p>1999 35 millimeter Miller oscillograph, by H. N. Bane. Jul, 13, 1945. NOC-57.1. C</p> | <p>2000 Threaded-closure plastic-case igniters for 2"25 rocket motors, by B. H. Sage. Mar. 16, 1944. JCC-11. OSRD-3645. C</p> <p>2001 3"5 and 5"0 spin-stabilized rockets. Oct. 25, 1944. OBC-41.1. C</p> <p>2002 3"5 AR bodies with non-ricochet properties at low angles of water impact; local intermediate report by I. S. Bowen. Oct. 10, 1944. IPC-64. C</p> <p>2003 Time relationships of certain entry phenomena for the Mk 13 torpedo at 20° entry angle, by S. Baker and R. Stokes. Sept. 11, 1945. NOC-24.1. C</p> <p>2004 Tip-off about a fixed point, by Wallace Hayes. Nov. 17, 1944. OPC-3. C</p> <p>2005 Torpedo deceleration, by W. R. Smythe. Apr. 10, 1943 and June 29, 1944. IBC-21, JBC-28. OSRD 2160. C</p> <p>2006 Torpedo (deceleration, model tests, torpedo range work); weekly progress reports by F. C. Lindvall, Max Mason, B. H. Rule, L. B. Slichter and W. R. Smythe. Dec. 26, 1943-Apr. 1, 1945. Report nos. PMC-2.12, 2.14-2.78 (Part 5). OSRD nos. 2104, 2117, 2124, 2131, 2140, 2145, 2151, 2158, 2166, 2172, 2181, 2186, 2196, 2203, 2211, 2217, 2222, 2232, 2241, 2248, 2253, 2261, 2269, 2280, 2289, 2296, 2303, 2310, 2319, 2325, 2332, 2338, 2344, 2355, 2363, 2371, 2379, 2388, 2394, 2400, 2405, 2414, 2420, 2427, 3094, 3191, 3225, 3252, 3277, 3307, 3328, 3383, 3393, 3470, 3474, 3495, 3520, 3530, 3573, 3612, 3640, 3648, 3686, 3710, 3739, 3767 C</p> |
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| <p>2007 Torpedo launching project report, by F. C. Lindvall. Feb. 1, 1945. JHC-5. OSRD-2346. C</p> <p>2008 Torpedo launching tests at CIT torpedo launching range, by F. C. Lindvall. May 17, 1944. JOC-2. OSRD 2105. C</p> <p>2009 Torpedo range work; biweekly progress reports by F. C. Lindvall. Apr. 15-Sept. 16, 1945. Report nos. PMC 2.79-2.89 (Part 5). OSRD nos. 2438, 2445, 2455, 2464, 2473, 2481, 2490, 2497, 2508, 2513, 2523. C</p> <p>2010 Training of barrage rocket crews, by W. F. Royal, W. A. Fowler and L. A. Richards. Sept. 23 and 29, 1942. JBC-10.4, 10.5. C</p> <p>2011 Trajectories of aircraft rockets. Jan. 4, 1946. UBC-35. OSRD 2540. R</p> <p>2012 Trajectories of aircraft rockets, 2"25 target. Oct. 10 and Dec. 14, 1944. UBC-29, 29.2. OSRD 2242, 2312. R</p> <p>2013 Trajectories of aircraft rockets, 3"5 and 5"0. Sept. 25, 1944. UBC-27. OSRD-2225. R</p> <p>2014 Trajectories of 5"0 high velocity aircraft rocket and 2"25 practice round. Dec. 15, 1944. UBC-32. OSRD-2314. R</p> <p>2015 Trajectories of 11"75 aircraft rockets. Nov. 17, 1944. UBC-30. OSRD 2290 C</p> <p>2016 Trajectories of rockets at short ranges, by L. C. Dams-gard and L. Davis, jr. May 31, 1945. OFC-3.1. C</p> | <p>2017 Trajectory data for 7"2 VAR (200-ft/sec) PBY 5. July 15, 1943. JNC-4.2 supplement. C</p> <p>2018 Trajectory drops for 5"0 HVAR (JPN). Aug. 24, 1944. IBC-71. R</p> <p>2019 Transfer from California Institute of Technology to U. S. Navy, NOTS, Inyokern, California. Vol. II, Capital equipment inventory, China Lake and Salt Wells Pilot Plants. Oct. 31, 1945. UZC-8. Vol. III, Capital equipment inventory transferred from Eaton Canyon Facility, Pasadena, California. Oct. 31, 1945. UZC-7. R</p> <p>2020 The transfer of the Foothill Camel Plant Section to the U. S. Navy. Vol. 1. Oct. 15, 1945. UZC-5. R</p> <p>2021 The transfer of the Goldstone Field Testing Station to the U. S. Navy at U. S. Naval Ordnance Test Station, Inyokern, California. Oct. 15, 1945. UZC-2. R</p> <p>2022 The transfer of the Morris Dam Hydrodynamics Station and the Morris Dam Underwater Ballistics Station to the U. S. Navy, U. S. Naval Ordnance Test Station, Inyokern, California. Oct. 15, 1945. UZC-3. R</p> <p>2024 The 2"25 subcaliber aircraft rockets Models 1 and 3. Nov. 20, 1944. JBC-30. OSRD-2305. R</p> <p>2025 2½" diameter model Mark 13 aircraft torpedo tests, by B. H. Fule and W. P. Huntley. Nov. 15, 1943. IOC-15. C</p> <p>2026 A 12-channel projector for the chemical warfare bomb (CWB), by Jesse W. N. DuMond. June 15, 1942. JEC-5. C</p> |
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- 2027 A 12-in. vertical press for the extrusion of Ballistite, by P. Sabin. Oct. 26, 1943. JDC-53. OSRD 3440. C
- 2028 [205-ft/sec sub-caliber projectile] Drawings. Apr. 17, 1943. C
- 2029 Type HIR Mark III - fuse tests; progress report nos. I-II by B. H. Rule. Sept. 19, 1942. OIC-7. C
- 2030 Type 3 Sight; pilot's reactions to, by D. Kirkpatrick. May 26, 1945. C
- 2031 Underwater ballistics; bi-weekly progress reports by Max Mason and L. B. Slichter. Apr. 15-Sept. 16, 1945. Report nos. PMC 2.79-2.89 (Part 6) OSRD nos. 2439, 2446, 2456, 2465, 2474, 2482, 2491, 2498, 2509, 2514, 2524. C
- 2032 Underwater behavior of 3.5-in. aircraft rockets, by I. S. Bowen. Dec. 6, 1943. JBC-23. C
- 2033 Underwater behavior of the 11"75 aircraft rocket, by I. S. Bowen. Oct. 25, 1944. IPC-65. OSRD 4350. C
- 2033a Underwater characteristics of 7.2-inch diameter Mousetrap projectile and 7-inch diameter integral-motor modification tests, by B. H. Rule. May 15, 1942. IPC-5. C
- 2034 Underwater performance of 5" diameter Mk 15 depth charge, by Max Mason and L. B. Slichter. Sept 21, 1945. IOC-44. C
- 2035 Underwater performance of 6" diameter, Mark 12 fast sinking depth charges with tails of various sizes and with Mark 140 fuze and protective cap, by B. H. Rule and W. P. Huntley. June 7, 1944. IOC-27. C
- 2036 Underwater performance of 7"2 diameter fast sinking depth charge with Mark 140 fuze, with and without protective cap, by B. H. Rule and W. P. Huntley. May 13 and Sept. 7, 1944. IOC-26, 26.2. OSRD-2223. C
- 2037 Underwater performance of British projectile type "C", by Max Mason and L. B. Slichter. May 10, 1945. IOC-28.5. OSRD 2475. C
- 2038 Underwater performance of hedgehog with line and weight ("mustard plaster"), by R. L. Noland. May 5, 1944. IOC-25. C
- 2039 Underwater performance of Mark 12 depth charge with Mark 140 fuze with and without protective cap, by R. L. Noland. Jan. 31, 1944. IOC-22. C
- 2040 Underwater performance tests of B.O. ASPC Mark 11, by B. H. Rule and W. P. Huntley. Aug. 10, 1943. IPC-33. C
- 2041 Underwater performance tests of Bureau of Ordnance 5"/38 caliber projectile, by B. H. Rule and W. P. Huntley. Aug. 5, 1943 and Aug. 7, 1944. IOC-6, 6.1. C
- 2042 Underwater performance tests of Bureau of Ordnance Mark 6 and Bureau of Ordnance Mark 8 projector charges (hedgehog) with Mark 140 fuze and protective cap, by R. L. Noland. Feb. 28, 1944. IOC-23. C

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| <p>2043 Underwater performance tests of Bureau of Ordnance Mk 6 hedgehog projectile, by B. H. Rule and W. P. Huntley. Aug. 25, 1943. IOC-9. C</p> <p>2044 Underwater performance tests of Mark 9 depth charges with Baranol filling, by B. H. Rule and W. P. Huntley. May 27, 1943. IOC-3. C</p> <p>2045 Underwater performance tests of Mark 17 aircraft depth charge with and without nose projection, by B. H. Rule and W. P. Huntley. Aug. 5, 1943. IOC-7. C</p> <p>2046 Underwater performance tests of 7"2 rocket Mark 3 mouse-trap assembly with Mark 131 fuze and with Mark 140 fuze and protective cap, by R. L. Noland. Feb. 4, 1944. IBC-60. C</p> <p>2047 Underwater photography facilities at Morris Dam, by B. H. Rule. Mar. 6, 1945. IHC-21. C</p> <p>2048 Underwater tests of depth charges and depth charge pistols, by B. H. Rule. June 18, 1943. JOC-1. C</p> <p>2049 Underwater tests of Mark 6 and Mark 9 depth charges, and depth charge pistols, Mark 6, Mark 6-Mod. 1, and Mark 7, by B. H. Rule and W. P. Huntley. Mar. 12, 1943. IOC-1. C</p> <p>2050 Underwater tests of mousetrap with line and drogue, by B. H. Rule and W. P. Huntley. Aug. 12, 1943. IOC-17. C</p> <p>2051 Underwater tests of $\frac{1}{2}$" model of 3.5 AR, by Max Mason and L. B. Slichter. Nov. 6, 1944. IPC-66. C</p> | <p>2052 Underwater tests of $2\frac{1}{2}$" ASR subcaliber with magnesium flare head, by B. H. Rule and W. P. Huntley. Aug. 3, 1943. IPC-37. Addendum no. 1, Dec. 27, 1943. C</p> <p>2052a Underwater tests of $2\frac{1}{2}$" VAR subcaliber with magnesium flare head, by B. H. Rule and W. P. Huntley. Dec. 20, 1943. IPC-51. C</p> <p>2053 Underwater tests of proposed practice hedgehog ammunition, by B. H. Rule and W. P. Huntley. June 2, 1943. IOC-4. C</p> <p>2054 Underwater trajectories of the 3"5 aircraft rocket Model 5, by R. V. Adams. June 10, 1944. JPC-21. OSRD-2161. C</p> <p>2056 Underwater trajectory tests of production units of British projectile type "C", by Max Mason and L. B. Slichter. Jan. 2, 1945. IOC-28.4. OSRD 2339. C</p> <p>2058 Universal sighting for guns and launchers, by Leverett Davis. Oct. 11, 1943. IPC-44. C</p> <p>2059 UP vacuum ranges as functions of the burning distance, by W. N. Arnquist. May 31, 1942. IPC-1. C</p> <p>2060 Use of A/S projector, Mark 20. Pt. I. The mousetrap attack; Pt. II. General information. Feb. 17, 1943. IEC-6. C</p> <p>2061 Use of 4.5-inch barrage rocket; manual by T. Lauritsen, F. C. Lindvall and L. A. Richards. Aug. 1, 1942. JBC-10. Revised, Nov. 16, 1942. JBC-10.2. 2d ed. Apr. 7, 1943. JBC-10.6. C</p> |
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| <p>2062 Use of mousetrap ammunition; manual by Thomas Lauritsen. June 27, 1942. JBC-8. Correction sheets, Nov. 2, 1942. ZBC-1. C</p> <p>2063 Use of rocket launcher Mk 51 Mod 0 (twelve-round automatic for 5"0 spin-stabilized rockets); manual. Nov. 13, 1944. JEC-20. OSRD 2281. R</p> <p>2064 Use of sub-caliber mousetrap ammunition; manual by O. C. Wilson. June 30, 1942. JBC-9. C</p> <p>2065 Use of the hydropressure plug for water impact studies; local intermediate report by R. R. Stokes. Sept. 15, 1944. IOC-35. C</p> <p>2066 Use of the 7-dial scoring register and tape recorder for rocket target practice, by James Edson. Aug. 11, 1943. JNC-6. R</p> <p>2067 The use of the ultimate strength as determined in a simple compression test as a measure of JP propellant quality of Mark 13 grains, by B. H. Sage. Dec. 1, 1945. JDC-89. C</p> <p>2068 U.W.R. projectile, by B. H. Rule and W. P. Huntley. Jan. 10, 1944. IBC-56.2. Addendum no. 1, Apr. 19, 1944. IBC-56.3. C</p> <p>2069 VAR-7V11 vertical anti-submarine rocket entry and underwater tests, by B. H. Rule and W. P. Huntley. June 2, 1943. IPC-28. C</p> <p>2070 VAR-7V13 vertical antisubmarine rocket entry and underwater tests, by B. H. Rule and W. P. Huntley. June 2, 1943. IPC-30. C</p> | <p>2071 VAR subcaliber underwater performance tests, by B. H. Rule and W. P. Huntley. June 17 and July 15, 1943. IPC-27, 27.1. C</p> <p>2072 Variable angle torpedo launcher, by Francis Carlisle. Aug. 9, 1945. NOC-38.1. C</p> <p>2072a Variation in weight of grains of fixed length for mousetrap ammunition. Sept. 3, 1942. IDC-14. C</p> <p>2073 Velocity-distance, velocity-time, and distance-time curves for underwater travel of various torpedoes, by E. D. Cornelison and J. G. Waugh. Sept. 30, 1945. NOC-48.2. C</p> <p>2074 Velocity-time and distance-time curves for war weight hot shots, by R. W. Ager. Apr. 10, 1945. NOC-48.1. C</p> <p>2075 Vertical antisubmarine bomb (VASB). Vertical flare (VP), by W. A. Fowler. July 23, 1942. OBC-14.2. C</p> <p>2075a The vertical bomb installation on a B-18A bomber; status report. Aug. 1, 1942. NMC-1.40. C</p> <p>2076 Vertical bombing, by C. D. Anderson, W. N. Arnquist, H. Babcock, L. Davis, T. Lauritsen, F. C. Lindvall and J. McMorris. Aug. 25, 1942-Jan. 8, 1943. Report nos. OBC 14.3-14.5, A-141. OSRD-1242. C</p> <p>2077 Vertical bombing from B-18A aircraft 205 ft/sec ammunition: officers' manual. May 15, 1943. JNC-4.3. C</p> |
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| <p>2078 Vertical bombing from PBV-5 aircraft; officers' manual. Jan. 19, 1943. JNC-4. Supplement, Mar. 5, 1943. R</p> <p>2079 Vertical bombing from PBV-5 aircraft 205-ft/sec ammunition. Mark 1 projectors--Squadron VP-63. Officers' manual. May 1, 1943. JNC-4.2. C</p> <p>2080 Vertical bombing from TBF-1 and 2 aircraft 300-ft/sec ammunition. June 5, 1943. JNC-5. C</p> <p>2081 Vertical bombing tests Mojave antiaircraft range. Aug. 25, 1942. C</p> <p>2081a Vertical bombing with ASB std. (Mousetrap), by B. H. Rule and W. P. Huntley. Jan. 1943. IBC-15. C</p> <p>2083 Vertical flare bomb field tests at Goldstone. July 15, 1942. C</p> <p>2084 Vibrating-reed drive unit, by Udene E. Younger. Apr. 3, 1944. NOC-53.5. R</p> <p>2085 Vibration testing of rocket motors, by K. H. Robinson. Feb. 17, 1944. JDC-60. OSRD 3790. C</p> <p>2086 Water entry and underwater trajectory tests on Bureau of Ordnance ASPC (mousetrap), by B. H. Rule. Dec. 3, 1942. IPC-14. C</p> <p>2087 Water entry of 8 in. diameter aircraft torpedo models with hemispherical and ogival nose, by B. H. Rule and W. P. Huntley. Nov. 13, 1944. IOC-20. OSRD 2282. C</p> | <p>2088 Water entry of 8 in. diameter model aircraft torpedoes with special noses and ring tail, by B. H. Rule and W. P. Huntley. Apr. 7, 1944. IOC-24. 1st revision, Nov. 1, 1944. OSRD 2255. C</p> <p>2089 Water entry tests of NAE beacon Mark 1, Mod. 1, by Mar Mason and L. B. Slichter. Mar. 1 and Aug. 14, 1945. IOC-40, 40.2. Title varies. C</p> <p>2090 Waterproofing of strain gages, by H. N. Bane. July 9, 1945. NOC-56.1. R</p> <p>2091 Well colloided, solvent-process powder for solventless extrusion, by B. H. Sage. July 7, 1944. JDC-64. OSRD-2173. C</p> <p>2092 YMTF fuse, by B. H. Rule and F. P. Huntley. Oct. 27, 1943. IIC-20. C</p> <p>2093 X-ray studies of double-base powder. Chromatographic studies of irradiated Radford sheet powder. Treatments to improve burning characteristics of extruded tubes, by R. B. Corey, A. L. LeRosen, Henri Levy and Linus Pauling. July 31, 1942. JDC-23. C</p> <p>2094 Yaw and deflection of UP's developed during burning, by Leverett Davis, jr. Feb. 23 and Mar. 31, 1942. ITC-1, MTC-3. C</p> <p>CALIFORNIA INSTITUTE OF TECHNOLOGY
Pasadena, Calif. OEMsr-702
Projects CWS-22, NO-33, NO-77R, NO-99, OD-14, OD-26, OD-27. See also Budd Induction Heating, Inc., OEMsr-671; California Institute of Technology, OEMsr-418; George Washington University, OEMsr-273; and Division 8, California Institute of Technology, OEMsr-881.</p> |
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| <p>2095 Investigations of double base powders; final report by Linus Pauling. Jan. 1943. C</p> <p>2096 Absorption coefficients from single measurements on sheet powders, by Robert B. Corey. I. Radford Ballistite JP 37; investigation no. 150. Feb. 9, 1943. II. JP 39 containing 0.1% nigrosine; investigation no. 152. Feb. 9, 1943. C</p> <p>2097 An apparatus for the determination of the burning rate of propellants. V. Modification of the pressure regulator; investigation no. 570 by Robert B. Corey. Feb. 19, 1944. C</p> <p>2098 The burning rate of Ballistite JP 214. III. Effect of moisture; investigation no. 542 by Robert B. Corey. Feb. 19, 1944. C</p> <p>2099 The burning rates of Ballistite JP 269, cordite JP 76, and a propellant from a German rocket torpedo; investigation no. 598 by Robert B. Corey. Mar. 16, 1944. C</p> <p>2100 Chromatographic studies of double-base powders. I, by Robert B. Corey, R. B. Escue, A. L. LeRosen and W. A. Schroeder. Jan. 1, 1943. A-132. OSRD 1152. C</p> <p>2101 The effect of orientation and of acetone on the burning rate of double base powder; investigation no. 618 by Robert B. Corey. Mar. 29, 1944. C</p> <p>2102 Investigations of double-base powders; interim and monthly reports by Robert B. Corey, R. B. Escue, A. L. LeRosen, Henri A. Levy, Linus Pauling, A. O. Dekker, Charlotte Green, R. M. Noyes and A. M. Soldate. July-Dec. 15, 1942. Report nos. RP 21.1-21.3. C</p> | <p>2103 Investigations of double-base powders, spectrophotometric studies. I, by Robert B. Corey, A. O. Dekker and A. M. Soldate. Dec. 16, 1942. A-124. OSRD 1103. C</p> <p>2105 Measurements of pH on double-base powders, by Robert B. Corey, Charlotte Green and Henri Levy. Feb. 23, 1943. A-151. OSRD 1265. C</p> <p>2106 Spectrophotometric determination of the absorption coefficients of double-base powders, by Robert B. Corey. IV. Hercules powder HES-4138.1, containing dinitrotoluene; investigation no. 86. Nov. 27, 1942. V. Radford Ballistite JP 39 containing nigrosine dye; investigation no. 110. Dec. 16, 1942. VI. Radford powder containing methylene blue; investigation no. 133. Feb. 3, 1943. VII. Cordite. JP-73, from Bruceton; investigation no. 136. Feb. 4, 1943. Title varies. C</p> <p>2107 X-ray diffraction studies of molecular orientation in double-base smokeless powders made by the solvent and solventless processes, by Henri A. Levy. Dec. 24, 1942. A-128. OSRD 1151. C</p> <p>2108 An x-ray diffraction study of Hercules smokeless powders HES-4135.1, HES-4138.1, and HES-4139.1. Relative molecular orientation in solvent process strand and grains extruded therefrom by the solventless process; investigation no. 100 by Robert B. Corey. Nov. 27, 1942. C</p> <p>DUKE UNIVERSITY, Durham, N. C.
OEMsr-733
Projects NO-23, NO-26, NO-33, OD-14, OD-52.</p> <p>2111 Burning rates of propellants; progress reports by L. G. Bonner. Nov. 5, 1942-Feb. 8, 1944. C</p> |
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2112 Determination of the linear burning rates of propellant powders from measurements in the closed chamber; interim report by L. G. Bonner. June 15, 1944. C

2113 Summary of discussion and information obtained on visit to Allegany Ballistics Laboratory, by Marcus E. Hobbs. June 13, 1944. C

2114 Values of the linear burning rates of propellants as obtained from closed chamber measurements; progress report by L. G. Bonner and M. E. Hobbs. Apr. 25, 1944. C

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Washington, D. C. OEMsr-273 Projects CWS-10, CWS-22, CWS-30, CWS-34, NA-197, NO-33, NO-34, NO-34.1, NO-35.1, NO-77R, NO-99, NO-120, NO-245, NO-247, NO-248, NO-249, NO-252, NO-253, NO-254, NO-296, OD-14, OD-26, OD-27, OD-33, OD-66, OD-155, OD-161, OD-163, OD-165, OD-166, OD-170, OD-171, OD-172, OD-184, OD-185, OD-186, OD-196, OD-197, OD-198, OD-200, OD-201. See also Budd Wheel Company, Inc., OEMsr-968; California Institute of Technology, OEMsr-418; Hercules Powder Company, OEMsr-337 and OEMsr-416; National Bureau of Standards; Western Electric Company, Inc., OEMsr-256; and Division 8, Carnegie Institute of Technology, OEMsr-202.

2119 Ballistics characteristics and rocket design data for extruded composite propellants; final report by R. Lumry and L. Streff. Dec. 1945. P-10.1. OSRD 5624. Addendum to OSRD 5576. R

2120 Booster launcher for testing of aircraft rockets; final report by M. J. Walker. Oct. 1945. W-18.1. OSRD 5812. R

2122 The Bumblebee rocket motor; final report by S. S. Penner. Dec. 1945. W-22. OSRD 5821. R

2123 Burning-rate studies of double-base powders; final report by W. H. Avery, R. E. Hunt and M. N. Donin. Jan. 1946. P-1. OSRD 5827. C

2127 A comparison of the specific impulse of four double-base rocket propellants; final report by John Beek, jr. and John P. Rappolt. Dec. 1945. P-3.1. OSRD 5829. R

2129 Correlation of wind tunnel data on rockets; final report by Seymour Sherman and N. G. Gunderson. Dec. 12, 1945. B-2.5. OSRD 5882. C

2130 The design of metal components for rocket motors; final report by H. C. Stumpf and George W. Engstrom. Dec. 1945. B-5. OSRD 5891. C

2131 Design of the high-velocity rocket, Vicar; final report by R. J. Thompson and R. R. Newton. Dec. 1945. W-21. OSRD 5793. C

2132 Determination of burning rates from pressure-time relations in closed chambers; final report by Lyman G. Bonner. Dec. 1945. P-1.3. OSRD 5816. C

2133 Determination of energies of explosion of propellant powders; final report by J. J. Donovan, L. F. Gonyea and H. Fritz. June 1946. P-6. OSRD 5841. C

2134 Determination of the burning rates of certain powders by the strand technique; final report by J. J. Donovan, L. F. Gonyea and H. Fritz. June 1946. P-1.2. OSRD 5833. C

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| <p>2135 The development of a high-performance composite-propellant charge for the 115-mm Aircraft Rocket; final report by R. W. Lumry and L. N. Streff. Dec. 1945. W-8.4. OSRD 5788. C</p> <p>2136 Development of a new 4.2-in. chemical mortar of radical design; final report by T. R. Paulson. Dec. 1945. W-9.4. OSRD 5790. C</p> <p>2137 Development of heads and fuzes for 115-mm Aircraft Rocket; final report by M. J. Walker, A. Kossiakoff and F. T. McClure. June 1946. W-8.3. OSRD 5786. C</p> <p>2138 Development of portable smokeless powder operated gas generator for pressurizing M2-A2 flame throwers; final report by A. S. Collins and A. A. Nellis. Dec. 1945. W-16.3. OSRD 5880. C</p> <p>2139 Development of propellant charge for 115-mm Aircraft Rocket; final report by Raymond L. Arnett, John Beek, jr., George W. Engstrom, Morton Goldman and Alexander Kossiakoff. June 1946. W-8.1. OSRD 5784. C</p> <p>2141 Development of rocket motor for 115-mm Aircraft Rocket; final report by George W. Engstrom and A. Kossiakoff. June 1946. W-8.2. OSRD-5785. C</p> <p>2142 Development of the T4 powder charge for the 2.36" rocket grenade; final report by R. Lumry and L. Streff. Nov. 29, 1945. W-3.4. OSRD 5589. C</p> <p>2143 The development of the T12 grenade; final report by D. M. Brasted. Dec. 1945. W-3.3. OSRD 5776. C</p> | <p>2145 Dry extrusion of powder at Allegany Ballistics Laboratory; final report by G. F. Padgett and Howard Higbie. Dec. 1945. P-7. OSRD 5844. R</p> <p>2146 Effects of pressure and temperature on the rate of burning of double-base powders of different compositions; final report by W. H. Avery, R. E. Hunt and L. D. Sachs. Mar. 1946. P-1.4. OSRD 5824. C</p> <p>2147 Electric charge in a rocket during and after burning; final report. 1944. OSRD-5889. C</p> <p>2149 Erosive burning of double-base powders; final report by R. J. Thompson and F. T. McClure. Dec. 1945. P-1.1. OSRD 5831. R</p> <p>2150 Extension of range of the 4.2 in. chemical mortar, M2; final report by G. C. Bowen, C. F. Curtiss, R. B. Kershner and A. R. T. Denues. June 1946. W-9. OSRD 5789. C</p> <p>2152 Flame temperature and radiation studies in rockets, by R. S. Craig. Dec. 1945. P-2.1. OSRD 5832. R</p> <p>2154 The follow-through rocket grenade, T1; final report by W. P. Spaulding and S. Golden. Dec. 1945. W-6.2. OSRD 5780. C</p> <p>2155 Formulation of manufacturing specifications for solid propellants; final report by Raymond L. Arnett. Nov. 1945. P-9. OSRD 5851. R</p> <p>2156 A gas generator for a small turbine; final report by S. S. Penner, A. J. Madden and R. L. Evans. Dec. 1945. W-17. OSRD 5808. R</p> |
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- 2160 Impulse determinations of rockets by means of rotating systems; final report by S. S. Penner and R. C. Whiteman. Dec. 1945. P-3.2. OSRD-5830. R
- 2161 Induction firing for rockets; final report by Carol F. Bjork and M. Bondy. Dec. 1945. W-18.3. OSRD 5814. C
- 2162 Instantaneous burning rate project; final report by S. S. Penner and R. C. Whiteman. Apr. 16, 1945. P-30.1. C
- 2164 Investigation of fiberglass laminates as materials for rocket motors; final report by J. Beek, jr and J. F. Kincaid. Dec. 1945. B-5.1. OSRD 5893. R
- 2165 Investigations of the use of rockets to dispense mine-clearing hose; final report by S. D. Brandwein, C. A. Boyd and W. J. Harrington. Dec. 1945. W-13.2. OSRD-5796. C
- 2166 The jet-accelerated armor piercing bomb; final report by C. N. Hickman. Oct. 15, 1945. W-1. OSRD 5761. R
- 2170 Mathematical studies of the motion of a spin-stabilized rocket during the burning period; final report by W. J. Harrington. June 1946. B-2.3. OSRD 5879. C
- 2173 Miscellaneous propellant studies. I.-Investigation of some special propellant charge designs, by L. G. Bonner. II.-The utilization of magnesium as a rocket fuel, by S. Golden and W. P. Spaulding. Final report. Dec. 1945. P-10. OSRD 5852. C
- 2174 A multiple-cartridge launcher for the JB-2; final report by R. B. Kershner, C. F. Curtiss, V. D. Russillo and C. N. Hickman. Jan. 1946. W-20. OSRD 5818. C
- 2175 The one-shot portable flame thrower, E16R1; final report by R. E. Hunt, A. Stefcik, L. F. Gonyea and W. H. Avery. Feb. 1946. W-16.2. OSRD-5805. C
- 2176 The 115-mm Aircraft Rocket; final report by R. E. Gibson and A. Kossiakoff. June 1946. W-8. OSRD 5781. C
- 2177 Physical properties of rocket propellants; final report by Howard Higbie. Apr. 1946. P-8. OSRD 5845. C
- 2179 Point-initiating base-detonating electromagnetic fuze, T2003; final report by F. T. McClure, D. D. Miller, J. F. Lemons and M. A. Paul. Mar. 1946. W-6.1. OSRD 5881. R
- 2181 Production model of portable smokeless powder-operated gas generator for pressurizing M2-A2 flame throwers, by Robert Lee James. Dec. 1945. W-16.3. OSRD 5806. Supplement to final report OSRD-5880. C
- 2182 Propellant charge design of solid fuel rockets; final report by W. H. Avery and J. Beek, jr. June 1946. B-4. OSRD 5890. C
- 2183 Propellant charge development for 4.5-in. spinner rockets, T38E5, T105, and T110; final report by D. M. Brasted and S. D. Brandwein. Dec. 1945. W-11. OSRD 5800. R

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| 2184 Recoilless 4.2-in. chemical mortars; final report by R. B. Kershner, A. R. T. Denues, J. M. Woods, J. Levin and F. Culp. Apr. 1946. W-10. OSRD 5791. C | 2195 Small-caliber high-velocity rocket, Curate; final report by R. J. Thompson, G. D. Brewer and R. R. Newton. Jan. 1946. W-21.1. OSRD-5820. C |
| 2186 The relation of manufacturing tolerances to rocket dispersion of fin-stabilized rockets; final report by R. R. Newton and M. Goldman. Dec. 1945. B-2.6. OSRD 5883. C | 2200 Static range operational and fire control equipment for rocket research; final report by C. M. Lathrop and N. E. Alexander. June 1946. J-1. OSRD 5855. C |
| 2187 The restriction of powder burning; final report by Amos Turk, L. G. Bonner, A. J. Madden, J. J. Donovan and W. H. Avery. Dec. 1945. P-4. OSRD 5834. C | 2201 The status of ABL projects as of VJ-day; final report by R. E. Gibson. Sept. 3, 1945. OSRD 5932. C |
| 2188 Rocket for projecting detonating cable; final report by C. A. Boyd, W. J. Harrington and D. Leenov. Jan. 1946. W-13.4. OSRD 5798. R | 2202 Step motor rockets; final report by C. N. Hickman and J. M. Woods. June 1946. W-7. OSRD 5794. C |
| 2189 The rocket for the Anti-personnel Mine-clearing Snake, M1; final report by C. A. Boyd and R. H. Bond. Dec. 1945. W-13.1. OSRD 5795. R | 2204 A study of ignition in the 2.36-in. rocket grenade; final report by R. S. Craig and L. D. Sachs. Dec. 1945. P-5. OSRD 5837. R |
| 2190 The rocket for the projected line charge; final report by C. A. Boyd, D. Leenov and W. J. Harrington. Dec. 1945. W-13.3. OSRD 5799. C | 2205 Summary of interim ballistic studies of the 4.2-in. chemical mortar; final report by A. R. T. Denues. Dec. 1945. W-9.1. OSRD 5792. C |
| 2191 The rocket for towing bangalore torpedoes; final report by C. A. Boyd and R. H. Bond. Nov. 1945. W-13.5. OSRD-5801. C | 2206 T59 high-velocity rocket grenade (super bazooka); final report by S. Golden, W. P. Spaulding and L. E. Morey. Dec. 1945. W-6. OSRD 5779. C |
| 2192 Rocket-projected special-purpose bombs; final report by A. Africano, J. B. Rosser, S. Shulman and J. F. Kincaid. Dec. 1945. W-23. OSRD 5822. C | 2206a Temperature transients in walls of rocket chambers; final report by E. A. Cook and E. H. deButts, jr. June 1946. B-3.1. OSRD 5887. C |
| 2194 60-mm recoilless mortar; final report by S. Golden and N. T. Grisamore. Jan. 1946. W-14. OSRD 5802. C | 2207 Tests of various methods of obtaining rotation of the 4.2-in. chemical mortar shell; final report by G. C. Bowen. Oct. 1945. W-9.2. OSRD 5694. C |

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| <p>2208 Theoretical studies of long-range and high-altitude rockets; final report by J. Barkley Rosser, F. T. McClure, C. N. Hickman and Nancy Marmer Thompson. Dec. 1945. B-6. OSRD 5897. C</p> <p>2212 Alternate formulations for H-5 powder, by M. N. Donin. [194-] P-10.1. II, Further testing of RDS 1295.1 and 1301.1; unsalted H-5 powder (G83-c). June 1, 1945. C</p> <p>2213 An analysis and interpretation of data dealing with igniter behavior in Revere 4.5" motors, by Raymond L. Arnett. Apr. 26, 1944. C</p> <p>2214 The Analytical Section of the Chemistry Laboratory; progress report by N. Marans. Mar. 13, 1945. C</p> <p>2216 Applications and performance of rockets, by C. N. Hickman. Feb. 15, 1944. C</p> <p>2217 Approximations to the aerodynamic equations in a rocket motor, by Grace Shover Quinn and J. Barkley Rosser. Feb. 16, 1944. C</p> <p>2218 Assembly operations for bayonet igniter model no. 2, by J. W. Burns. Mar. 29, 1944. A-88M. OSRD 3429. C</p> <p>2219 Assisted take-off tests using British UP3 rockets; preliminary draft by Leo Maas. June 12, 1942. C</p> <p>2220 1. An attempt to promote burning at low temperatures by decreasing heat losses to the rocket chamber. 2. Minimum charge of 7/8 R.O.W. 10034 which gives satisfactory burning in the 4 1/2 in. Budd at 20°C, by C. F. Bjork. June 28, 1943. C</p> | <p>2221 Automatic control firing system for flame thrower, by C. N. Hickman. Nov. 11, 1944. C</p> <p>2222 Bar type strain gage for use in measuring thrust of rockets, by C. N. Hickman. Feb. 9 1942. C</p> <p>2223 Black powder manual, by J. W. Burns. Feb. 24, 1944. C</p> <p>2224 Blast tests on the 4.2" R.C.M., by G. C. Bowen. [194-] C</p> <p>2225 Blow-up tests of the Revere 4 1/2 inch rocket, by Charles A. Boyd, Sol D. Brandwein, D. W. Osborne and R. B. Staver. Dec. 7, Dec. 29, 1942, Nov. 20, 1943 and Jan. 19, 1944. Title varies. C</p> <p>2226 Blow-up tests on 3 1/4 inch motors, by Alexander Kossiakoff. Jan. 6, 1943. C</p> <p>2227 Boattail pressure plate and obturator assembly for the 4.2" shell, by C. N. Hickman. Mar. 31, 1945. C</p> <p>2228 Booster launcher, firing program #9. Determination of maximum penetration of homogeneous armor plate by the 115mm rocket using inert SAP heads, by M. J. Walker. June 23, 1945. W-80. C</p> <p>2229 Budd 4.5 inch rocket flight tests, by C. A. Boyd, M. Duval, M. R. Goff, D. W. Osborne and M. J. Walker. May 13-Aug. 5, 1943. C</p> <p>2230 Burning characteristics of JRP-2, the Japanese BAKA propellant, by M. N. Donin. July 15, 1945. P-105. C</p> |
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- 2231 Burning characteristics of Russian powders, by Carol F. Bjork and Alfred Africano. Jan. 13, 1943. A-136. OSRD-1142. C
- 2232 Burning period and radial dispersion in Budd 4.5 inch motors, by Milton R. Goff and Darrell W. Osborne. Dec. 9, 1942. C
- 2233 Burning rate of publican candle powder, by M. A. Fineman. Feb. 12, 1945. C
- 2234 [Burning-rate studies of double-base powder] Weekly progress reports by W. H. Avery, R. S. Craig, Milton Donin, Joseph J. Donovan, M. A. Fineman, Harry Fritz, Lloyd F. Gonyea, R. E. Hunt, F. T. McClure, A. J. Madden, N. Marans, S. Solomon Penner and L. D. Sachs. Mar. 27, 1944-Jan. 9, 1945. C
- 2235 Burning rates of black powder "wafers" and grains of various size, by A. Africano and C. F. Bjork. June 5, 1943. C
- 2236 Burning rates of carbon cooled powders, by Edward H. de-Butts, jr. Oct. 6, 1944. C
- 2237 Burning rates of laminated charges, by Sidney Golden. May 29, 1944. C
- 2238 Burning rates of restricted grains of G-2 (Russian) powder, by A. J. Madden and M. A. Fineman. Oct. 9, 1944. C
- 2239 Business trip to St. Marys, Pennsylvania, by J. Vodonik. Sept. 20, 1944. C
- 2240 Calculations of the heats of explosion of smokeless powders, by R. E. Gibson. May 19, 1942. R
- 2241 Calculations on the Hickman suggestion for US V-1 launching, by R. B. Kershner and J. J. Donovan. Jan. 19, 1945. C
- 2242 Calorimetry; weekly progress reports by L. F. Gonyea. Aug. 28-Dec. 12, 1944. C
- 2243 Camera data taken in connection with Ordnance Program No. 5191, by J. Barkley Rosser. May 8, 1944. C
- 2244 Cancellation of Project OD26 and substitution of specific projects; memorandum no. 2 by C. N. Hickman. Nov. 12, 1943. C
- 2245 Causes of dispersion in 4.5-inch rockets, certain aspects of the malalignment problem; preliminary report by Milton R. Goff. Aug. 6, 1943. C
- 2246 Changes in the spider design in the extrusion dies at Indian Head, by Howard E. Higbie. July 6 and 17, 1943. A-72M. OSRD 1623. C
- 2247 Characteristics of the 4½-inch rocket projectile, by D. W. Osborne. June 6, 1943. C
- 2248 Characteristics of the 115-mm aircraft rocket, by A. Kossiakoff. May 19, 1945. C
- 2249 Comments on 4.2" recoilless and conventional mortars, by C. N. Hickman. Dec. 17, 1944. C

- 2250 Comparison of cordite S.C. composition with and without potassium nitrate, by Carol F Bjork. Dec. 10, 1942. C
- 2251 Comparison of G22 (JPN) powder extruded through dies with and without a parallel section, by A. Bernstein. Mar. 19, 1945. C
- 2252 Comparison of Radford and Canadian powders of the Russian formulation at -25°C, by Joseph J. Donovan. Dec. 27, 1943. C
- 2253 A comparison of the burning rate of a powder containing potassium cryolite with the rate of one containing potassium nitrate, by William H. Avery. May 19, 1943. C
- 2254 Concerning the use of rockets with liquid propellants: in meteorological research; for long-distance transportation of mails; as long-distance projectiles with a range of 1000 km and beyond, by Fritz Neubauer. July 22, 1941. R
- 2255 Conference at Frankford Arsenal on annealing and calibrating of copper balls, by C. N. Hickman. Feb. 7, 1945. C
- 2256 Conference on facilities required for solvent extrusion at ABL, by A. Kossiakoff. May 16, 1944. R
- 2257 Conference on methods of launching JB-2, by C. N. Hickman. Jan. 20, 1945. C
- 2258 Contents of ABL-WPR reports classified under ABL project numbers. [1945] C
- 2259 Cross-pin trap for long rocket powder columns, by C. N. Hickman. May 14, 1942. C
- 2260 "D" range; progress reports by Robert Evans and Milton Donin. Nov. 21, 1944-Jan. 31, 1945. C
- 2261 Demonstrations and descriptions of new 4.2-inch chemical mortars of radical design, by R. E. Gibson. Nov. 1, 1945. ABL SR-11. OSRD-5879. R
- 2262 Density of loading tests with 7/8" NT-PXS powder; preliminary draft by Alfred Africano. July 22, 1942. C
- 2263 Description and facilities of the Allegany Ballistics Laboratory, Cumberland, Md. [1945] ABL SR-5. C
- 2265 Description of Infantry School problems witnessed at Fort Benning, Ga., Sept. 5-10, by R. A. Ruehrwein and A. Kossiakoff. [194-] C
- 2266 The design of cage traps for rockets, by C. N. Hickman. Mar. 18, 1943. C
- 2267 Design of rocket targets adopted by the Army Ordnance, by L. A. Skinner. May 21 and July 13, 1942. A-46M. OSRD-701. C
- 2268 Detection of extrusion holes in OSPFT grains by means of x-rays, by R. E. Hunt. Nov. 30, 1945. W-162.10. C
- 2269 [Determination of energies of explosion of propellant powders] Progress reports by L. F. Gonyea. Sept. 12, 1944-Jan. 3, 1945. C

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| <p>2270 Determination of mass emissivity from restricted burning data, by S. Solomon Penner. Oct. 16, 1944. C</p> <p>2271 Determination of powder gas emissivities, by R. S. Craig and S. Solomon Penner. Oct. 4, 1944. C</p> <p>2272 Determination of useful temperature range for Russian lot 1 in the 4½ in. Budd motor, by C. F. Bjork. June 10, 1943. C</p> <p>2273 Development of portable cordite operated gas generator for pressurizing M2-A2 flame throwers, by A. S. Collins and A. A. Nellis. July 12, 1945. C</p> <p>2274 [Development of portable smokeless powder-operated gas generator for pressurizing M2-A2 flame throwers] Progress with project W-163 since Mar. 12, 1945, by A. S. Collins. Apr. 9, 1945. C</p> <p>2275 Diffusion coefficient of acetone in double base powder, by S. S. Penner and S. Sherman. [194-] C</p> <p>2276 Diffusion of nitroglycerine in wrapped powder grains, by S. S. Penner and S. Sherman. Jan. 15, 1945. C</p> <p>2278 Discussion of work on jet propulsion projects, by C. N. Hickman. Nov. 3, 1941. C</p> <p>2279 Dispersion flight tests of Budd 4.5 inch rockets, by Charles A. Boyd, D. W. Osborne and M. J. Walker. Oct. 14-Dec. 30, 1942. C</p> | <p>2281 Double base powder for jet propulsion, by R. E. Gibson. May 25, 1942. C</p> <p>2282 Driver rocket improvements, by C. N. Hickman. Dec. 2, 1944. C</p> <p>2283 Drop tests of radio fuzes for the 12 inch jet accelerated A.P. bombs; preliminary report by A. Kossiakoff. Dec. 29, 1942. C</p> <p>2284 Dry extrusion of double-base powder at Indian Head, I, by Howard E. Higbie. Dec. 7, 1942. A-123. OSRD 1100. II, Extrusion of solventless sheet powder of the Russian formulation. Jan. 26, 1943. A-133. OSRD 1226. C</p> <p>2285 [Dry extrusion of powders] Weekly progress reports by G. F. Padgett. Feb. 5-Mar. 11, 1944. R</p> <p>2286 Dry extrusion of Western Cartridge ball powder, by Joseph J. Donovan. June 2, 1943. C</p> <p>2287 The effect of burning area of powder on the chamber pressure in rockets, by C. N. Hickman. Nov. 28, 1941. C</p> <p>2288 The effect of burning time on the dispersion of rockets, by C. N. Hickman. Jan. 29, 1943. C</p> <p>2289 Effect of different igniter on maximum pressure in Revere 4.5" motors with 4.65 pounds of no. 14400 powder at 70°F, by Raymond L. Arnett. Jan. 10, 1944. C</p> <p>2290 Effect of jet blast on airplane wing, by C. N. Hickman. Aug. 7, 1942. C</p> |
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| <p>2291 Effect of nitroglycerin and total volatile content on the burning characteristics of JPT powders; preliminary draft by Alfred Africano and M. J. Walker. Aug. 25, 1942. C</p> <p>2292 The effect of non-linear acceleration on the dispersion of rockets; preliminary draft by C. N. Hickman. Jan. 7, 1943. C</p> <p>2293 Effect of nozzle contour on the performance of ABL JATO Model II and a new nozzle design for this model, by L. G. Bonner. Aug. 22, 1945. W-191. C</p> <p>2294 Effect of $1\frac{1}{2}$ percent KNO_3 in $7/8$ in. x $1\frac{1}{4}$ in. Russian powder 4107.1, by Alfred Africano. Nov. 27, 1942. C</p> <p>2295 Effect of pressure and nozzle taper on the velocity of a 14 pound 2-5/8 inch diameter rocket, by C. N. Hickman. Feb. 13, 1941. C</p> <p>2296 The effect of pressure and temperature on the rate of burning of double-base powders of different compositions, by William H. Avery and Roy E. Hunt. Sept. 3, 1943. C</p> <p>2297 Effect of pressure and temperature on the rate of burning of double-base powders of different compositions, by William H. Avery and Roy E. Hunt. Oct. 27, 1943. A-225. OSRD 1993. Revisions and corrections, Dec. 23, 1944. ABL-WPR supplement 6. OSRD-4568. II, by W. H. Avery, R. E. Hunt and L. D. Sachs. Mar. 3, 1945. ABL-WPR supplement 9. OSRD 4942. R</p> | <p>2298 Effect of temperature gradient on the performance of A2L, J.A.T.O. Model II, by L. G. Bonner. Aug. 21, 1945. W-191. C</p> <p>2299 The effect of the initial velocity of a rocket on the kinetic energy given to it by the jet, by C. N. Hickman. [194-] C</p> <p>2300 The effect of treatment with p-phenylenediamine on the ignition of powder grains, by M. N. Donin. July 11, 1945. P-53.1. C</p> <p>2301 Effect of ultrasonic irradiation on powder strength, by Dorothy Reinhard, Barbara Smith and Howard Higbie. July 13, 1945. P-80. C</p> <p>2302 Effects of storage at extreme temperatures on rocket propellants. [194-] C</p> <p>2303 Efficiency of rockets compared to guns, by C. N. Hickman. Sept. 5, 1942. Supplement to OSRD Catalog no. 2506. C</p> <p>2304 Electro magnetic fuse, by C. N. Hickman. Mar. 27, 1945. C</p> <p>2305 Electron microscopy of double-base powder, by M. N. Donin. May 4, 1945. P-10.1. C</p> <p>2306 An electronic dc/ac converter for use with wire strain gages, by S. Golden and N. E. Alexander. Oct. 4, 1943. II. An improved model having better frequency response. Dec. 2, 1943. C</p> |
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- 2307 Elimination of heat losses to rocket chambers in an effort to increase range; preliminary draft by Carold F. Bjork. Jan. 5, 1943. C
- 2308 Establishment of temperature limits for 12 inch AP jet propelled bomb, by Leo Maas, jr. June 2, 1943. C
- 2310 Expanded program for conventional 4.2 chemical mortar, by C. N. Hickman. Apr. 30, 1945. C
- 2311 Experimental arrangement for obtaining pressure, travel and time relations for the 4.2 in. chemical mortar, by Arthur Russell Taylor Denues. Mar. 16, 1943. C
- 2312 Experimental powders from Kenvil, by W. H. Avery. Aug. 4, 1945. P-100. C
- 2313 Experiments with a thinner web propellant for use in the $4\frac{1}{2}$ inch rocket projectile; interim report by R. E. Gibson. Apr. 27, 1943. C
- 2314 Extrusion and impact testing of DINA powders, by G. F. Padgett. Dec. 27, 1943. C
- 2315 Extrusion of cordite type powders at Indian Head, by Howard E. Higbie. Nov. 16, 1942. C
- 2316 The extrusion of dried, solvent processed double-base powder at Indian Head, by Howard E. Higbie. Sept. 28, 1943. A-220. OSRD 1886. R
- 2317 The extrusion of dried solvent processed double base powder at Indian Head, by Howard E. Higbie, E. S. Johnson and Roy E. Hunt. Sept. 26, 1942 and Oct. 15, 1943. II, Powders containing dibutylphthalate. Oct. 17, 1942. III, Powder of the cordite S. C. type. Oct. 21, 1942. IV, Comparison of conical and curved dies. Dec. 11, 1942. VII, Experimental powders of various compositions in 3/8 O.D. grains for closed bomb tests. Jan. 27, 1943. VIII, Trench mortar sheet dyed with a cyanine dye. Feb. 1, 1943. IX, Effect of preheating and press temperature on extrusion pressures and consolidation. Feb. 5, 1943. C
- 2318 Extrusion of new formulations, by G. F. Padgett. Aug. 21, 1945. P-71. C
- 2319 [Extrusion of powders] Progress reports of Group 2A7, by Howard Higbie and G. F. Padgett. May 15, 1944-Jan. 24, 1945. C
- 2320 The extrusion of solventless sheet powder at Indian Head, by Joseph J. Donovan. June 15, 1943. C
- 2321 The extrusion of solventless sheet powder of the Hercules trench mortar sheet formula, by G. F. Padgett. Nov. 9, 1942. C
- 2322 Extrusions of double-base powder at Indian Head, by G. F. Padgett. July 20, 1943. A-203. OSRD 1658. R
- 2323 Factors to be considered in design of rocket having annular jet, by C. N. Hickman. Dec. 14, 1942. C

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| <p>2324 Facts pertinent to wrapped charges obtained from the British reports published by the Armaments Research Department, Woolwich, by Paul L. Kingsley. Apr. 5, 1944. C</p> <p>2325 Failure of Budd 4½ inch motors with a 1.77 inch throat in recent flight tests at 130°F, by F. T. McClure and J. B. Rosser. Nov. 12, 1943. C</p> <p>2327 Fin tail attachment for 4.2" chemical shell, by C. N. Hickman. Dec. 23, 1944. C</p> <p>2328 Fireproofing of fabric for assisted take off, by Leo Maas, jr. July 16, 1942. C</p> <p>2329 Firing mechanisms for 3½ inch rockets. [194-] C</p> <p>2330 Firing of G-47 powder in the Kleinschmidt chamber, by A. J. Madden and J. A. Fineman. Dec. 30, 1944. C</p> <p>2331 Firing tests of the jet propelled parachute flares, by W. E. Jeremiah. July 18, 1942. C</p> <p>2332 Firing tests on long "A" charges, by C. N. Hickman and Alfred Africano. Jan. 3, Feb. 7 and Mar. 3, 1942. Title varies. C</p> <p>2333 Fissure tests of (a) Sunflower Plant powder, lot 1 (b) 0.02 percent Prussian blue powder, HES 4238.1C (c) 0.05 percent Prussian blue powder, HES 4239.1C, by A. Bernstein. May 18, 1943. C</p> <p>2334 The fissuring of double base powders at low pressures, by Alfred Africano. Aug. 12 and Sept. 14, 1942. A-93. OSRD-886. Title varies. C</p> | <p>2335 Flat spring type rocket driver, by C. N. Hickman. Dec. 9, 1944. C</p> <p>2336 Flight tests of 4½ inch rockets, by C. A. Boyd, C. N. Hickman, D. W. Osborne and M. J. Walker. Aug. 21, 1942, May 1 and 5, 1943. Title varies. C</p> <p>2337 Flight tests of powders A-34 and A-35 in Budd 4½ inch rockets, by D. W. Osborne and M. J. Walker. June 12, 1943. C</p> <p>2338 Flight tests of T-12, one-piece rocket grenade, by D. M. Brasted. Oct. 1, 1943. C</p> <p>2339 Flight tests of 3½ in. rockets loaded with composite propellant 218B, by R. A. Ruehrwein. June 19, 1943. C</p> <p>2340 Flow of propellant gases in rockets, by J. O. Hirschfelder. Aug. 25, 1942. C</p> <p>2341 Fly-screen barrage, by H. D. Baker. Apr. 14, 1941. R</p> <p>2342 4.2" match-type rocket driver, by C. N. Hickman. May 18, 1945. C</p> <p>2343 4.2 inch mortar recoilless attachment, designs no. 2 and no. 3, by C. N. Hickman. Nov. 7, 1943. C</p> <p>2344 The 4.2" recoilless chemical mortar. [194-] and [Nov. 20, 1944] Title varies. C</p> |
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| <p>2345 4.5" Budd flight program XX, by M. J. Walker and C. A. Boyd. Feb. 1, 1943. C</p> <p>2346 A 4½-in. high-explosive rocket shell for projection from airplanes; progress report by C. N. Hickman and L. A. Skinner. July 2, 1942. A-70. OSRD 673. C</p> <p>2347 4.5 inch rocket flight program XVII, XVIII, XIX, by M. J. Walker and C. A. Boyd. Jan. 20, 1943. C</p> <p>2348 [4½-in. rockets] Weekly progress reports, Jet Propulsion Research Laboratory, Indian Head, Md. May 16, 1943-Feb. 4, 1944. Report nos. 1-39. C</p> <p>2349 14" accelerated AP bomb drop tests, by C. N. Hickman. Jan. 2, 1942. C</p> <p>2350 14" AP bomb tests, Indian Head, Maryland, by C. N. Hickman. Mar. 27-June 25, 1942. Title varies. C</p> <p>2351 The functioning of copper ball gages with and without grease, by C. F. Bjork. May 18, 1943. C</p> <p>2352 Further tests of A-20, A-21 and A-22 powders in Budd 4.5-inch rockets, by Charles A. Boyd. May 10, 1943. C</p> <p>2353 Further tests of 1-1/8 in. x ¼ in. double base powder, by Nathan Shapiro. Sept. 30, 1942. C</p> <p>2354 Further tests of the California Institute of Technology solventless extruded 3-3/4" x 1¼" powder charges, by Alfred Africano. Sept. 15, 1942. C</p> | <p>2355 Further tests of the Western Cartridge Company cemented ball powder charges, by M. Walker. July 15, 1942. C</p> <p>2356 Fuze, T-2003. Proposed organization for development, by F. T. McClure. Feb. 19, 1945. W-60.4. C</p> <p>2357 A gage for obtaining the maximum lateral thrust of rockets, by C. N. Hickman. Feb. 2, 1942. C</p> <p>2358 German solid fuel units for jet assisted take-off of planes (JATO) and for launching systems for guided missiles, by P. T. Kirwan. Oct. 30, 1945. F-1. C</p> <p>2359 Ground test on jet propelled 14" A.P. bomb, by C. N. Hickman. July 16 and 29, 1941. C</p> <p>2360 Heat transfer by radiation to rocket motors, by S. S. Penner. Mar. 22, 1945. C</p> <p>2361 Heats of explosion, by Joseph J. Donovan. Nov. 1, 1944. C</p> <p>2362 High pressure tests of Budd 4½ inch rockets with 90° seat between head and motor, by Charles A. Boyd and D. W. Osborne. Nov. 12, 1942. C</p> <p>2363 High pressure tests of burst-er tubes in Budd 4½ inch rockets, by Charles A. Boyd and Darrell W. Osborne. Dec. 5, 1942. C</p> <p>2364 High pressure tests of the Budd 4.5 inch rocket, pilot plant production, by C. A. Boyd. July 24, 1943. C</p> |
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| <p>2365 High temperature tests of Budd $4\frac{1}{2}$ inch rockets with 1.75 inch throats, by D. W. Osborne. May 31, 1943. C</p> <p>2366 High velocity, short burning time rocket, by C. N. Hickman. Sept. 8, 1943. C</p> <p>2367 History of rocket development, by Albert Hausenstein. [194-] Published serially in the "Zeitschrift fur das gesamte Schiess- und Sprengstoffwesen". May - Oct. 1939. R</p> <p>2368 Ignition delay in the $4\frac{1}{2}$ in. rocket. Neon tube method of measuring component times, by N. E. Alexander. May 18, 1943. C</p> <p>2369 Impact, frictional-impact and static spark sensitivities of igniter mixtures and black powder; technical note no. 46 by M. A. Elliott and F. W. Brown. Mar. 9, 1945. C</p> <p>2370 Impulse determinations; preliminary report by S. S. Penner and R. C. Whiteman. May 14, 1945. P-12. C</p> <p>2371 Indian Head Committee meeting. May 23, 1942. C</p> <p>2372 Indianhead tests, by C. N. Hickman. Oct. 2, 1941. C</p> <p>2373 Influence of radiation upon the burning rates of propellants; weekly progress report by W. H. Avery. July 8, 1944. ABL-WPR supplement no. 1. OSRD 3880. R</p> <p>2374 Initial velocity, and range dispersion, in terms of burning time of Canadian propellant powder, 3/8" stick for rocket, H E., 2.36", M-6, by J. A. Folse. May 15, 1943. C</p> | <p>2375 Inspection and testing of a 7/8-in. stick powder; progress report by John Beek, jr. Aug. 4, 1942. A-78. OSRD-769. C</p> <p>2376 Insulation for wires in burning rate bomb, by J. J. Donovan. Jan. 31, 1945. C</p> <p>2377 Integrated absorption coefficient for G-2 for the visible region, by S. Solomon Penner. Nov. 21, 1944. C</p> <p>2378 Integrated absorption coefficients from 0.70μ to 0.90μ of G-73 and B-100, by R. S. Craig. Mar. 28, 1945. C</p> <p>2379 Interior ballistics of rockets, by R. E. Gibson. Feb. 23, 1944. C</p> <p>2380 Interior ballistics of the 4.2 in. recoilless mortar, by R. B. Kershner, C. F. Curtiss and S. Golden. Nov. 30, 1943. C</p> <p>2381 Internal ballistics of powder driven rockets, by Emory Lakatos. Aug. 21, 1940. C</p> <p>2384 Investigation of BAKA rocket power unit, by J. J. Donovan. May 21, 1945. W-510. C</p> <p>2385 Itinerary followed during visit to Fort Benning, by R. A. Ruehrwein, J. B. Rosser, R. B. Kershner and A. Kosiakoff. Sept. 13, 1944. C</p> <p>2386 JATO program, by L. G. Bonner, A. J. Madden, M. Fine-man, A. Turk, R. S. Craig and W. A. Hendricks. Apr. 3, 1945. W-191. C</p> |
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| <p>2387 Jet accelerated 4.2" chemical projectile, by C. N. Hickman. July 16, 1942. C</p> <p>2388 Jet acceleration of armor piercing bombs; progress report by C. N. Hickman. June 30, 1941. A-4. OSRD 8. C</p> <p>2389 Jet acceleration tests of the 14-in. armor-piercing bomb, by C. N. Hickman. July 9, 1942. A-69. OSRD 691. C</p> <p>2390 Jet propelled illuminating flare, by W. E. Jeremiah. July 3 and Nov. 11, 1942. A-113. OSRD 992. C</p> <p>2391 Jet propulsion, Indian Head Committee meeting, by J. A. Snackenber. Nov. 12, 1941. C</p> <p>2392 Jet propulsion project; welding of solventless sheet powder by pressure, by C. N. Hickman. July 22, 1941. C</p> <p>2393 Jet propulsion tests, by C. N. Hickman and Jesse W. M. DuMond. June 3-Nov. 14, 1941. Title varies. C</p> <p>2394 Jet propulsion weapons for use in national defense, by C. N. Hickman. Oct. 9, Dec. 5 and 12, 1941. Title varies. C</p> <p>2395 Jumping-jack powder tester, by C. N. Hickman. Oct. 31, 1941. C</p> <p>2396 Laboratory tests for fireproofing airplane fabric, by Leo Maas, jr. Aug. 12, 1942. C</p> <p>2397 A laminated propellant charge for rockets; progress report no. 2 by Sidney Golden. May 18, 1943. C</p> | <p>2398 A laminated propellant design for a "superbazooka" rocket; progress report no. 3 by Sidney Golden and Wallace P. Spaulding. Sept. 25, 1943. C</p> <p>2399 Launching methods for U. S. V-1, by C. N. Hickman. Jan. 14, 1945. C</p> <p>2400 A less regressive design for powder grains (A-75M); Theoretical study of the validity of a certain method of determining a burning law (A-76M); by Beatrice Kelly, R. B. Kershner, F. T. McClure and J. Barkley Rosser. Nov. 25, 1943. OSRD 2069. C</p> <p>2401 Long range rockets, by J. Barkley Rosser and R. E. Gibson. Apr. 8, 1943. C</p> <p>2402 Low temperature performance of T-80 (3½" RG), by L. C. Whiteman and S. S. Penner. Mar. 10, 1945. C</p> <p>2403 A low velocity projectile with extremely short burning distance, requiring an extremely short projector, by Sidney Golden. May 18, 1943. C</p> <p>2404 M6A3 ignition studies; progress report by R. S. Craig. Sept. 28, 1944. C</p> <p>2405 The manufacture of solventless double base powder, by F. H. Untiedt. Dec. 1942. R</p> <p>2406 Measurement of rocket velocity, by C. N. Hickman. Nov. 4, 1942. C</p> <p>2407 Measurements of temperature developed at the front of the burster tube in the Budd 4½-inch rocket, by Charles A. Boyd. Dec. 31, 1942. C</p> |
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| <p>2408 Mechanical fuse and ignition system for 12 inch AP jet accelerated bomb, by Leo Maas, jr. May 13, 1943. C</p> <p>2409 Meeting of Division 3. Nov. 28, 1944. C</p> <p>2410 A method of induction firing for rockets; weekly progress report by C. F. Bjork and M. Bondy. Jan. 20, 1945. ABL-WPR supplement 8. OSRD 4694. R</p> <p>2412 Milled slots in driver rocket adaptor for parting by shear, by C. N. Hickman. Mar. 24 and Apr. 18, 1945. C</p> <p>2413 Miniature rockets for wind tunnel tests, by G. C. MacDonald, R. C. Whiteman and S. S. Penner. Sept. 13, 1945. C</p> <p>2414 Minutes of meeting of Indian-head Jet Propulsion Committee, by E. C. Watson. July 30, 1941. C</p> <p>2415 Minutes of meeting of Rocket Propellant Panel Sub-group on Chemical Analysis and Heats of Explosion of Rocket Powders, by R. E. Gibson. Oct. 2, 1944. C</p> <p>2416 Minutes of the second and third meetings of the sub-group on burning rates and related problems, by R. E. Gibson. Apr. 17 and 29, 1944. C</p> <p>2417 Mixed charge experiments; preliminary report by C. A. Boyd. Oct. 14, 1943. C</p> <p>2418 Mixed charges of SOW 14319 and A-61 powders in the 4.5 inch rocket, by C. A. Boyd and S. Brandwein. Nov. 6, 1943. C</p> | <p>2419 Modification of 4.2" shell and attachment for 4.2" mortar, by C. N. Hickman. Nov. 17, 1944. C</p> <p>2420 Modifications of H-5 powder, by M. N. Donin. May 5, 1945. P-10.1. C</p> <p>2421 Modified T-2 powders, by M. N. Donin. June 12, 1945. P-10. C</p> <p>2422 Mounting requirements for measuring thrust of rockets, by C. N. Hickman. Sept. 17, 1941. C</p> <p>2423 Multiple cartridge launcher for airplanes, by C. N. Hickman. Oct. 9, 1945. C</p> <p>2424 Multiple cartridge launcher for JB-2, by R. B. Kershner and V. D. Russillo. June 25, 1945. C</p> <p>2425 Multiple cartridge launching system for the U. S. version of the V-1 bomb, by C. N. Hickman. Jan. 17, 1945. C</p> <p>2426 A multiple nozzle rocket; a high velocity rocket propelled by thin web powder, by C. N. Hickman. Aug. 19, 1943. C</p> <p>2427 Multiple nozzle rocket formulas and suggested designs, by C. N. Hickman. Aug. 26, 1943. C</p> <p>2428 New equipment for measuring and recording the pressure of powder gases in rocket chambers and the thrusts exerted by blocked rockets, each as a function of time, by Jesse W. M. DuMond. Nov. 13, 1941. A 28M-30M. OSRD 30. C</p> |
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| <p>2429 New gases for measuring the thrusts of rockets, by C. N. Hickman. Feb. 28, 1942. A-38M, 39M. OSRD 433. C</p> <p>2431 A new rocket design in which the turning moment due to an unsymmetrical jet is greatly reduced, by C. N. Hickman. Nov. 21, 1942. C</p> <p>2432 A new system for obtaining interior ballistics data for rockets: P, fPdt, t curves, by S. Golden. Jan. 18, 1944. C</p> <p>2433 Nitroglycerine in restricting coatings, by J. J. Donovan and N. Marans. June 27, 1945. C</p> <p>2434 A "non-jumping" powder tester, by C. N. Hickman. Dec. 30, 1941. C</p> <p>2435 Non-separate type driver rockets for 4.2" recoilless mortar, by C. N. Hickman. Aug. 8, 9 and 11, 1945. Title varies. C</p> <p>2436 A note on the elevations, lead angles and times of flight for certain 4½ inch rocket projectiles when fired from plane to plane with reference to evasive action by the target, by J. Barkley Rosser. Mar. 12, 1943. C</p> <p>2437 Notes and tests on the design and performance of jet propelled devices, by C. N. Hickman. Sept. 15 and Nov. 18, 1941. Report nos. A 4M-A 27M. OSRD 28, 29. C</p> <p>2438 Notes on A. E. Maynor rocket, by C. N. Hickman. Jan. 11, 1941. C</p> <p>2439 Notes on production model drawings for jet accelerated 12 inch AP bomb, by C. N. Hickman. Apr. 7, 1943. C</p> | <p>2441 Notes on status of production of solvent extruded sticks of double base powder, by R. E. Gibson. Nov. 26, 1941. C</p> <p>2442 Notes on trip to England and France, by C. N. Hickman. Nov. 4, 1944. C</p> <p>2443 Obliquity of jets to prevent spin of recoilless guns, by C. N. Hickman. Dec. 15, 1943. C</p> <p>2444 1" x 8" static test motor: Partial burning experiments; weekly progress reports by Sidney Golden and L. Morey. Apr. 19-May 1, 1944. C</p> <p>2446 A partial-burning powder tester, by C. N. Hickman. June 26, 1942. A-13M. OSRD-665. C</p> <p>2447 Performance of 4½ inch light weight projector, by James D. DeSanto. Apr. 23, 1943. C</p> <p>2448 Photographic data upon flight tests of Nebel rocket, by M. J. Walker, C. A. Boyd and D. M. Brasted. Sept. 4, 1943. C</p> <p>2449 Photographic review of projects under investigation at Allegany Ballistics Laboratory, by R. E. Gibson. Aug. 1, Nov. 1, 1944 and Mar. 1, 1945. ABL Photographic Review nos. 1-3. C</p> <p>2450 Pictorial description of 4.2" chemical mortar E37. [1944] C</p> <p>2451 Plane to plane rockets with velocities exceeding 1000-ft/sec, by R. E. Gibson. Feb. 14, 1943. C</p> <p>2452 Powder powered cable launcher for JB-2, by C. N. Hickman. Feb. 24, 1945. C</p> |
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| <p>2453 Preliminary description of the E37 4.2 in. chemical mortar, by R. E. Gibson. Aug. 1, 1945. ABL-SR 8. OSRD-5394. C</p> <p>2454 Preliminary epitome of development work to increase the range of the 4.2" chemical mortar M2 by ballistic improvements adapted to immediate field application, by Arthur Russell Taylor Denues. July 2, 1945. C</p> <p>2455 Preliminary notice of the first meeting of the Subgroup on Physical Properties of Powder and Related Problems of the Rocket Propellant Panel, by R. E. Gibson. June 7, 1944. C</p> <p>2456 Preliminary plans for recoilless depth charge projector, by C. N. Hickman. June 4, 1942. C</p> <p>2457 Preliminary report on flight tests of 4.5 inch rockets, by D. W. Osborne and C. A. Boyd. May 5, 1943. C</p> <p>2458 Preliminary report on 4½ inch Budd rockets fired at Fort Fisher, by D. W. Osborne and M. R. Goff. Oct. 14, 1942. C</p> <p>2460 Preliminary results on accelerated aging of powders, by L. G. Bonner and R. S. Craig. July 27, 1945. W-191. C</p> <p>2461 Preliminary tests of DINA powder in the rocket grenade, by S. Golden. Jan. 4, 1944. C</p> <p>2462 Preliminary work on the application of the optical lever principle to following projection tip-off and yaw motions during the early burning of rockets, by Milton R. Goff, Howard H. Abram, Charles S. Blackson and Edward D. Lewis. Jan. 1, 1945. C</p> | <p>2463 The preparation and burning characteristics of restricted grains of G-47 powder, by A. J. Madden and M. A. Fineman. Jan. 9, 1945. C</p> <p>2464 Present status of studies of central venturi rocket, by C. F. Bjork. Dec. 23, 1943. C</p> <p>2465 Present status on the burning characteristics of Radford British, Bruceton cordite and British cordite powders, by Leo Maas, jr. and C. F. Bjork. May 17, 1943. C</p> <p>2466 Pressure differences between the closed and open ends of propellant channels, by Sidney Golden. Mar. 9, 1943. C</p> <p>2467 Pressure limiting shear ring for rockets, by C. N. Hickman. Oct. 31, 1941. C</p> <p>2469 Pressure relationships within small rockets, by Sidney Golden. Aug. 7 and Nov. 25, 1942. Title varies. C</p> <p>2470 Pressure-temperature relationships of 3/4 in. x 5/16-in. powder (lot 84) fired in the 4½ in. Budd chamber having a 1.83 in. throat, by C. F. Bjork. July 3, 1943. C</p> <p>2471 Pressure-temperature relationships of 3/4 in. x 5/16-in. powder (ROW 84) fired in the T-6 chamber, by N. T. Grisamore and G. C. Bowen. Dec. 13, 1943. C</p> <p>2473 Progress in the development of a smokeless powder assisted take off unit, by L. G. Bonner, A. J. Madden, M. Fineman and W. A. Hendricks. Feb. 21, 1945. W-191. C</p> |
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| <p>2474 Progress of studies of igniters in the rocket grenade, by R. S. Craig and L. D. Sachs. Nov. 20, 1944. C</p> <p>2475 Progress of the jet propelled parachute flares, by W. E. Jeremiah. July 30 and Sept. 12, 1942. C</p> <p>2476 Progress on the 4½ inch rocket, by D. W. Osborne. Feb. 15, 1943. C</p> <p>2477 Progress report on BBP, by Larry Streff, A. S. Wenborne and R. Lumry. Feb. 23, 1945. C</p> <p>2478 Progress report on CP218B, by R. A. Ruehrwein. Aug. 26, 1944. C</p> <p>2480 Proof tests of the T-12 rocket grenade, by Donald M. Brasted and Thomas L. Gallo. Jan. 29, 1944. C</p> <p>2481 [Propellants] Progress report nos. 1-37, by W. H. Avery and H. Higbie. Jan. 30-Nov. 2, 1945. C</p> <p>2482 Proposed methods of analysis for rocket propellant powder for naval specification, by R. E. Gibson. June 15, 1944. C</p> <p>2483 Provisional report on the first 110 rounds of Project 3265 at Aberdeen Proving Ground, by J. Barkley Rosser. Mar. 3, 1944. C</p> <p>2484 Radiation correction for experimental burning rates, by S. S. Penner. Feb. 1, 1945. C</p> <p>2485 Radiation effects in restricted burning, by S. Solomon Penner and M. A. Fineman. Oct. 27, 1944. C</p> | <p>2487 Range control of 4.2 chemical mortar shell by means of variable length firing pins, by C. N. Hickman. May 7, 1943. C</p> <p>2489 Reaction-type driver formulae, by C. N. Hickman. Mar. 2, 1945. Errata, Mar. 8, 1945. C</p> <p>2490 Reaction-type shell driver for recoilless guns, by C. N. Hickman. Feb. 24, 1945. C</p> <p>2491 Recoilless gun for follow through projectile, by C. N. Hickman. June 26, 1944. C</p> <p>2492 [Recoilless weapons] Progress report nos. 1-15, 17-38, by C. N. Hickman, G. H. Hopkin, R. B. Kershner and A. R. T. Denues. Feb. 5-Oct. 24, 1945. C</p> <p>2493 Recommended procedure for the chromatographic-spectrophotometric determination of diethyl-phthalate in double base powder, by R. E. Gibson. May 15, 1944. C</p> <p>2495 Reduction of spotting data, by J. Barkley Rosser. Feb. 3, 1944. II, by J. A. Brittain, J. Barkley Rosser and H. Siller. Feb. 16, 1944. C</p> <p>2496 Reduction of theodolite readings, by J. Barkley Rosser. Jan. 22, 1944. C</p> <p>2498 Remarks on the applications and performance of rockets, by C. N. Hickman. Oct. 28, 1942. A-57M. OSRD 965. C</p> <p>2499 Report on a visit to the Naval Research Laboratory in connection with determining Young's modulus of powder, by M. F. Bondy. Sept. 15, 1944. C</p> |
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- 2500 Requirements for the 4½ inch projectile, by R. E. Gibson. June 20, 1942. C
- 2501 Resonance in the burning of perforated grains of G-6e powder supported on trap rods, by R. L. Evans. Nov. 5, 1945. P-11. C
- 2502 Restricted burning; weekly progress report by A. J. Mad-den. Sept. 11, 1944. C
- 2503 Restriction tests of grains for OSPFT, by A. Stefcik. Dec. 1945. W-162. R
- 2504 Restrictive coatings, by Amos Turk, Arthur J. Madden and F. P. Kelly. III. Annealing changes in solvent-bonded plastic sheets. Apr. 20, 1945. IV. Butyl and Perbunan rubber compositions. May 15, 1945. V. Properties of cellulose acetate compositions. June 5, 1945. P-41. VI. Properties of polyvinyl alcohol. June 5, 1945. P-41. VII. Wrapping procedures and new formulations with cellulose acetate. June 18, 1945. P-41. VIII. Preparation of specimens for nitroglycerin analysis. July 5, 1945. P-41. IX. Bond strengths. Aug. 13, 1945. P-41. X. Restriction by hot molding; status report. Sept. 6, 1945. P-41. C
- 2505 Review of mortar, 81 mm, T-55 at Fort Benning, by C. N. Hickman. May 9, 1945. C
- 2506 Rocket applications and performance, by C. N. Hickman. Aug. 23 and Sept. 22, 1942. Title varies. C
- 2507 Rocket applications, rocket design, propellant charge development, propellant research; progress reports 1-63 by R. E. Gibson. Mar. 30, 1944-Aug. 15, 1945. OSRD nos. 3727-3735, 3788, 3826, 3831, 3849, 3860, 3879, 3901, 3931, 3965, 3986, 4021, 4041, 4061, 4088, 4130, 4137, 4164, 4201, 4227, 4248, 4274, 4295, 4312, 4338, 4355, 4384, 4425, 4443, 4471, 4495, 4524, 4577, 4611, 4640, 4665, 4687, 4719, 4803, 4828, 4892, 4908, 4939, 4972, 5009, 5037, 5061, 5100, 5130, 5170, 5193, 5218, 5255, 5292, 5316. Title varies. C
- 2508 Rocket driver for 4.2" shell (attached), by C. N. Hickman. June 16, 1945. C
- 2509 Rocket driver for 81mm and 4.2" shells, by C. N. Hickman. Dec. 13, 1944. C
- 2511 Rocket fundamentals, an introduction to the theory and practice of military rocket engineering. Dec. 26, 1944. ABL-SR 4. OSRD 3992. R
- 2512 Rocket grenade flight test 774-F; preliminary report by D. M. Brasted. July 16, 1943. C
- 2513 The rocket motor for mine clearing snake, M-1; development and current status. by C. A. Boyd and R. H. Bond. Dec. 23, 1944. ABL-WPR supplement 7. OSRD 4569. C
- 2514 Rocket Propellant Panel of the Joint Committee on New Weapons; minutes of first meeting of Sub-group on Physical Propellants and Related Problems, by R. E. Gibson. July 15, 1944. C
- 2515 Rocket propulsion efficiency, by E. Lakatos. Aug. 29, 1941. C

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| <p>2516 Rocket shell driver for use with mortars fired at low angles of elevation, by C. N. Hickman. [194-] C</p> <p>2517 Rocket target tests, by A. J. Dempster. Sept. 25, 1941. C</p> <p>2520 Rotating launcher for 4½ inch projectiles, by M. J. Walker and C. F. Bjork. Feb. 4, 1944. C</p> <p>2521 Safety match type igniter for light-weight driver rocket, by C. N. Hickman. Jan 25, Jan. 30 and Feb. 17, 1945. Title varies. C</p> <p>2522 Scale model of JB-2 launcher, by R. B. Kershner, J. J. Donovan, C. N. Hickman and V. D. Russillo. Feb. 1 and Mar. 19, 1945. Title varies. C</p> <p>2523 "Scotch" cellulose tape as a deterrent for stick powder, by A. Africano and C. F. Bjork. May 17, 1943. C</p> <p>2524 Selected bibliography of bombs and rockets, by J. Barkley Rosser. Nov. 9, 1942. R</p> <p>2525 SERD project, by W. H. Avery. Sept. 4, 1945. W-191. C</p> <p>2526 7/8" x ¼" Russian powders Nos. 4072, 4012.2 and 4010, by Carol F. Bjork. Sept. 4, 1942. C</p> <p>2527 7.2" incendiary bomb to be fired from 4.2" chemical mortar, by C. N. Hickman. July 18, 1945. C</p> | <p>2528 Shear nozzle insert for 12 inch AP bomb, by Leo Maas, jr. July 22, 1943. C</p> <p>2529 Short driver rocket, by C. N. Hickman. Dec. 31, 1944. C</p> <p>2530 Short flight test of jet propelled 100 pound demolition bomb, by Leo Maas, jr. Dec. 1, 1942. C</p> <p>2532 A simple system for obtaining pressure-time curves of rockets having short action times, by S. Golden. Dec. 27, 1943. C</p> <p>2533 Small grain powder charges for recoilless guns, by C. N. Hickman. July 25, 1945. C</p> <p>2534 Solvent and solventless types of double-base powder for rockets, by R. E. Gibson and W. N. Lacey. Jan. 9, 1943. C</p> <p>2535 Some effects of composition, powder temperature and radiation on the rate of burning of double-base powders, by William H. Avery. Jan. 11, 1943. A-65M. OSRD 1156. C</p> <p>2536 Some jet blast measurements of 3¼ inch rockets, by C. N. Hickman. Aug. 18, 1942. C</p> <p>2537 Spectroscopic project; progress report by R. S. Craig and S. Solomon Penner. Dec. 16, 1944. C</p> <p>2539 Static and flight tests of 18 lots of 7/8 in. Canadian powder, by Alfred Africano. June 17, 1943. C</p> |
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| <p>2540 Static comparison firings with C.I.T. 2$\frac{1}{2}$-in. rocket motors, by C. A. Boyd. May 4, 1944. C</p> <p>2542 Static tests of A-32 powder in the 4.5 inch rocket (throat diameter - 1.83 in.), by C. A. Boyd and D. W. Osborne. Nov. 10, 1943. C</p> <p>2543 Static tests of A-60 powder in the 4.5 inch rocket, by S. D. Brandwein and C. A. Boyd. Nov. 22 and Dec. 14, 1943. C</p> <p>2544 Static tests of A-61 powder in the 4.5 in. rocket, by S. D. Brandwein and C. A. Boyd. Oct. 14, 1943. C</p> <p>2545 Static tests of Budd 4.5 inch rockets having 1.75 inch nozzle diameters, by C. A. Boyd and D. W. Osborne. Apr. 28, 1943. C</p> <p>2546 Static tests of California Institute of Technology extruded powder charges, by Alfred Africano. Apr. 29, 1942. C</p> <p>2547 Static tests of JP 265 powder in the Budd 4.5 inch rocket, by C. A. Boyd. July 23, 1943. C</p> <p>2548 Static tests of large web powder in the 4.5 inch rocket, by C. A. Boyd. May 26, 1943. C</p> <p>2549 Static tests of 7/8 JPT 10034 in the 4$\frac{1}{2}$ inch Budd rocket, by C. F. Bjork. Apr. 12, 1943. C</p> <p>2550 Static tests of Sunflower pilot lot no. 1, a 7/8 in. propellant containing 1.3 percent K₂SO₄, by D. W. Osborne. Nov. 8, 1943. C</p> | <p>2551 Static tests of tapered traps in the Budd 4.5 inch rocket, by C. A. Boyd. May 27, 1943. C</p> <p>2552 Static tests of 12 inch jet propelled A.P. bomb, by C. N. Hickman and Leo Maas, jr. Aug. 22, 1942-Mar. 31, 1943. A-55M. OSRD 924. Title varies. C</p> <p>2553 Static tests on billet rolled cordite 4173.1, 1.3 in. x 0.3 in., by C. F. Bjork. Apr. 26, 1943. C</p> <p>2554 Static tests with 4$\frac{1}{2}$ in. Budd motors, by Alfred Africano. Jan. 28, 1943. C</p> <p>2555 Static tests with long stick powder A-30 (7/8 in. x $\frac{1}{4}$ in. x 15-3/8 in.), by Alfred Africano. Apr. 30, 1943. C</p> <p>2556 Static thrust-time and pressure-time measurements at Indian Head on rocket propulsion; supplementary reports. Sept. 11, 1941-Feb. 17, 1942. C</p> <p>2557 Status of development of the 4$\frac{1}{2}$-inch Budd projectile; amended copy by R. E. Gibson. Jan. 25, 1943. C</p> <p>2558 Status of 4$\frac{1}{2}$ inch H.E. rocket shell to be projected from airplanes, by L. A. Skinner and C. N. Hickman. Apr. 21, 1942. C</p> <p>2559 Status of recoilless weapons division projects and estimates of time required for completion, by C. N. Hickman. Apr. 14, 1945. C</p> |
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| <p>2560 Status of static test being made with Radford experimental powders A-68 and A-69 in the 4.5 inch rocket, by S. D. Brandwein and C. A. Boyd. Jan. 4, 1944. C</p> <p>2561 Status of tests of K₂SO₄ powder (SUN pilot lot no. 1) in Revere and Budd 4½ inch rockets, by D. W. Osborne, C. A. Boyd and S. Brandwein Nov. 18, 1943. C</p> <p>2562 Status of 3½ inch rockets manufactured by the Westinghouse Company for use with identification flares, by A. Kossiakoff. Sept. 28, 1942. C</p> <p>2563 Status of 3½-T-6 and artillery flares, by N. T. Grisamore and G. C. Bowen. Dec. 27, 1943. C</p> <p>2564 The strain pressure gage, by C. N. Hickman. [194-] A-27M. C</p> <p>2565 Studies in ignition, abstract of, by C. N. Hickman. July 25, 1945. C</p> <p>2566 Studies of powder gas radiation; weekly progress report by R. S. Craig and S. S. Penner. Oct. 16, 1944. C</p> <p>2568 Studies of the 4.2-in. chemical mortar; progress reports I-V by Arthur R. T. Denues. Sept. 17, 1942. C</p> <p>2569 Study of ABL heating plant, by J. A. Folse. Nov. 9, 1945. R</p> | <p>2570 Study of Africano and Walker's "Effect of nitroglycerine and total volatile content on the burning characteristics of JPT powders, Aug. 25, 1942", by J. A. Folse. Apr. 18, 1944. C</p> <p>2571 Study of Bourdon pressure gage, by J. A. Folse. Nov. 6, 1945. C</p> <p>2572 Study of copper ball pressure measurements, by J. A. Folse. Mar. 15, 1945. C</p> <p>2573 Study of electronic gauge pressure measurements, by J. A. Folse. Nov. 1, 1945. R</p> <p>2575 Study of measurements of instantaneous maximum chamber pressure of rocket H.E., A.T., M-6 (bazooka), by J. A. Folse. July 1943. C</p> <p>2576 Summary of British rocket developments, by P. T. Kirwan. Oct. 29, 1943. B-1. C</p> <p>2577 Summary of engineering conference with Mr. W. W. Farr of the Budd Wheel Company, by C. N. Hickman. Mar. 15, 1945. C</p> <p>2578 Summary of ignition studies performed under Project P-51, by R. S. Craig and L. D. Sachs. Apr. 23, 1945. P-51. C</p> <p>2579 Super bazooka computations; multiple nozzle, by C. N. Hickman. Sept. 15, 1943. C</p> <p>2580 The T-59 high velocity rocket grenade; status report by Sidney Golden, L. E. Morey and W. P. Spaulding. Nov. 25, 1944. WPR supplement 4. OSRD 4466. C</p> |
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- 2582 Tables of ranges and times of flight for certain values of angle of departure, muzzle velocity, and ballistic coefficient, by G. L. Gross and W. P. Spaulding. June 17, 1944. R
- 2584 Tactical use and performance of the 3½ inch identification flare (IF-3), by Alexander Kossiakoff and Nelson T. Grisamore. July 3, 1943. C
- 2585 Technical conference on plane to ground rocket tests, by M. R. Goff and D. W. Osborne. Apr. 7, 1944. Revision, June 14, 1944. ABL-SR-2. R
- 2586 The technical development of the Budd model of the 4½ inch rocket projectile and the facilities available for its production, by R. E. Gibson. Mar. 31, 1943. C
- 2587 Temperature and afterburning tests with 7.6% TNT powder HES 4207.1, by Alfred Africano. May 13, 1943. C
- 2588 Temperature limits of 12 inch AP bomb with nozzle insert, by Leo Maas, jr. July 7, 1943. C
- 2589 Tentative agenda for the first meeting of the Rocket Propellant Panel Sub-group on Chemical analysis and heats of explosion of propellants, by R. E. Gibson. Aug. 8, 1944. Addendums I-III, Aug. 16-23, 1944. C
- 2590 Test of 4½ inch Budd motor, by Charles A. Boyd. Nov. 6, 1942. C
- 2591 Test of non-slotted fins on high velocity Budd 4½ inch rockets, by D. W. Osborne and C. A. Boyd. May 6, 1943. C
- 2592 Test of Revere 4½ in. M8 rockets with strengthened trap head, by D. W. Osborne. Sept. 18 and Oct. 5, 1943. Title varies. C
- 2593 Test of the Mallina projectors, models 2, 3 and 5, by James D. DeSanto. May 13, 21 and 27, 1943. Title varies. C
- 2594 Tests of A31 powder in the Budd 4.5 inch rocket, by M. J. Walker and C. A. Boyd. July 22, 1943. C
- 2595 Tests of Budd 4.5 inch rockets with long burster tubes and 1.75 inch throats, by M. J. Walker, C. A. Boyd and D. W. Osborne. June 4, 1943. C
- 2596 Tests of Budd standard motors, by M. J. Walker. Sept. 18, 1942. C
- 2597 Tests of cemented ball powder charges, by Alfred Africano and M. Walker. Mar. 25 and Sept. 24, 1942. A-98. OSRD-920. C
- 2598 Tests of 4.2 in. chemical mortar, by Alfred Africano and Sidney Golden. June 17 and July 31, 1942. C
- 2600 Tests of 5.2 x 1 in. California Institute of Technology extruded charges and of the 5 x 1 in. Hercules compressed washer "C" columns, by Alfred Africano. Nov. 10, 1942. C
- 2601 Tests of non-slotted fins on high velocity Budd 4½ inch rockets, by D. W. Osborne, C. A. Boyd and M. J. Walker. May 13, 1943. C

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| 2602 Tests of restricted grains in the Kleinschmidt turbine; weekly progress report by A. J. Madden and M. A. Fineman. Oct. 16, 1944. C | 2613 Tests on powders containing 1½% potassium nitrate and varying total volatiles content, by Carol F. Bjork. Jan. 5, 1943. C |
| 2604 Tests of 7/8 HES 4104.3 (contains 7.00 percent dinitrotoluene), by C. F. Bjork. Dec. 1, 1942. C | 2614 Tests on 7/8" N.T. powder, by C. N. Hickman and Alfred Africano. Feb. 14 and Apr. 1, 1942. Title varies. C |
| 2605 Tests of 7/8 inch stick powder, J.P.T. lot 1, by Alfred Africano. Apr. 13, 1942. C | 2615 Tests on 7/8 in. x ¼ in. screw extruded powder, by C. F. Bjork. Sept. 30, 1942. C |
| 2606 Tests of 7/8 in. x ¼ in. powders HES 4071.1 (2 percent dibutylphthalate) and HES 4042.1C (4 percent dibutylphthalate), by Carol F. Bjork. Nov. 15, 1942. C | 2616 Tests on 7/8 in. x ¼ in. special 4081.1 (0.15 percent P-aminophenol) and 4082.1 (0.05 percent P-aminophenol), by Carol F. Bjork. Nov. 10, 1942. C |
| 2607 Tests on "B" charges, by C. N. Hickman. Jan. 24, 1942. C | 2617 [Tests on solvent and solventless double base powder] Summary tables by C. N. Hickman. Jan. 22, 1942. C |
| 2608 Tests on folding fins for bombs, by C. N. Hickman. July 1, 1942. C | 2618 Tests on 3/8 in. x 1/8 in. powder for the rocket grenade, by Sidney Golden and H. E. Leap. Dec. 31, 1942. C |
| 2609 Tests on 4½ in. alloy steel motors at high temperatures. High temperature tests on Midland steel motors having spot welded bands, by C. F. Bjork. July 22, 1943. C | 2619 Tests on 3/4 and 7/8 inch, grades A and B extruded Ballistite, by C. N. Hickman. Jan. 3, 1942. C |
| 2610 Tests on Hercules solventless sheet powder welded by using dibutylphthalate and pressure, by C. N. Hickman. July 24, 1941. C | 2620 Tests with copper ball pressure gages omitting use of grease and neoprene obturating discs, by Alfred Africano. Apr. 28, 1943. C |
| 2611 Tests on jet propulsion assisted take-off for naval aircraft, by C. N. Hickman. Mar. 24, 1942. C | 2621 Thermal ignition and arming elements for use with rockets, by C. N. Hickman. Oct. 5 and Nov. 12, 1942. A-58M. OSRD 1022. C |
| 2612 Tests on 1 in. x 17 in. chemical grenade, by James D. DeSanto. Jan. 14, 1943. C | |

- 2623 The 3½ in. launcher for use by paratroops, by M. J. Walker. Jan. 29, 1943. C
- 2624 Throat diameter, burning area and pressure relations in rockets, by C. N. Hickman. [194-] C
- 2626 2.36" smooth bore recoilless gun, by C. N. Hickman. July 5, 1944. C
- 2627 Uniform nomenclature for internal ballistics reports, by W. H. Avery. [194-] C
- 2628 Upper temperature limit for Revere 4.5 inch rockets, by D. W. Osborne and C. A. Boyd. May 20, 1943. C
- 2629 Urgent need of a projectile having a velocity of 600-ft/sec, by C. N. Hickman. Sept. 14, 1943. C
- 2631 Use of small balloons (less than 10 ft. in diameter) with bombs attached as protection of urban areas against aircraft. [194-] R
- 2633 Velocity of rocket where weight of propellant is a large percentage of the total weight, by C. N. Hickman. July 9, 1941. C
- 2634 Visit to Budd Wheel Company, by C. N. Hickman. Jan. 4, 1945. C
- 2635 Weapons development, by C. N. Hickman. May 25, 1944. C
- 2636 Western Cartridge compression molded powders, by M. N. Donin. June 18, 1945. II. Additional compositions. July 31, 1945. P-10.1. C

- 2637 Work at the George Washington University, by J. B. Rosser, R. J. Thompson, F. T. McClure, E. F. Davis, M. R. Goff, J. Rapport, J. Beek, jr. and Zella Proffer Saylor. July 10 and Sept. 24, 1943. C

HERCULES POWDER COMPANY

Wilmington, Del. OEMsr-337
Projects CWS-22, NO-33, NO-34, NO-120, OD-26. See also Hercules Powder Company, OEMsr-416; and George Washington University, OEMsr-273.

- 2638 Coating smokeless powder with flameproof lacquer, by C. W. Gault. July 24 and Dec. 21, 1942. C
- 2640 Effect of aging at elevated temperature on solventless smokeless powder samples, by Max G. Wirick. Dec. 21, 1942. C
- 2641 N.D.R.C. smokeless powder - supplementary development work, by Karl E. Balliet, Arthur P. Fries, jr., William L. George, Edward Mitchell, J. B. Todd, J. P. Troy and Harry A. Winnerling, jr. Apr. 29, Oct. 19, Nov. 16 and Dec. 21, 1942. C
- 2642 Physical testing of experimental solventless smokeless powder, by Max G. Wirick. Nov. 16, 1942. C
- HERCULES POWDER COMPANY
Wilmington, Del. OEMsr-416
Projects CWS-22, NO-33, NO-34, NO-120, OD-26. See also Hercules Powder Company, OEMsr-337; and George Washington University, OEMsr-273.
- 2643 Development of jet propulsion powders, by C. W. Gault. July 1, 1943. OSRD 1846. R

JET PROPULSION RESEARCH LABORATORY
See George Washington University, OEMsr-273.

UNIVERSITY OF MINNESOTA, Minneapolis, Minn. OEMsr-716
Projects CWS-22, NO-33, NO-77R, NO-99, OD-14, OD-26, OD-27, OD-33. See also California Institute of Technology, OEMsr-418; George Washington University, OEMsr-273; and Hercules Powder Company, OEMsr-337 and OEMsr-416.

- 2644 Studies on propellants; final report. Oct. 31, 1945. 4 vols. UM/1-UM/43. OSRD-6374. R
- 2645 The burning of a colloidal propellant - JP-76, by Bryce L. Crawford, jr. [Nov. 2, 1943] UM/13. C
- 2646 Burning rate data for various powders, by [B. L. Crawford, jr.] Oct. 3, 1944. UM/19. C
- 2647 Burning rates and heats of explosion of six selected powders, by B. L. Crawford, jr., C. M. Huggett, J. J. McBrady and Marie S. Hanson. Nov. 22, 1944. UM/23. C
- 2648 Burning rates for various powders, by C. M. Huggett, R. G. Parr, Marie S. Hanson and Phyllis Burchill. Apr. 18, 1945. UM/31. C
- 2649 Burning rates of composite propellants, by Marie S. Hanson. Apr. 6, 1945. UM/30. C
- 2650 Combustion products from powder burning at various temperatures, by John J. McBrady and Bryce L. Crawford, jr. Feb. 7, 1944. UM/15. C
- 2653 Double-base powders with catalyzed nitrocellulose, by B. L. Crawford, jr., Clayton Huggett and J. J. McBrady. Aug. 17, 1944. UM/18. C
- 2654 The effect of radiation on burning rates as measured in the electrical vessel, by B. L. Crawford, jr. and R. G. Parr. Feb. 1, 1945. UM/27. C
- 2655 The effects of ultrasonic waves on propellants, by I. I. Rusoff. June 15, 1945. UM/33. C
- 2656 Fundamental studies on the burning of composite propellants, by B. L. Crawford, jr., C. M. Huggett, J. J. McBrady and Marie S. Hanson. July 20, 1945. UM/35. C
- 2657 The ignition by radiation and fissuring of double-base powders, by Bryce L. Crawford, jr., Clayton Huggett, Herbert S. Isbin and John J. McBrady. Apr. 11, 1943. A-171. OSRD-1370. C
- 2658 Ignition of propellants. I. Data on gas flames, by B. L. Crawford, jr., C. M. Huggett and R. G. Parr. Dec. 22, 1944. UM/24. C
- 2659 Ignition times of double-base powders, by B. L. Crawford, jr. and R. G. Parr. Oct. 17, 1944. UM/20. C
- 2660 Observations on the burning of double-base powders, by Bryce L. Crawford, jr., Clayton Huggett and John J. McBrady. Apr. 21, 1944. A-268. OSRD 3544. R

- 2661 On the theoretical treatment of the burning mechanism, by B. L. Crawford, jr. and R. G. Parr. Feb. 17, 1945. UM-29. II. July 11, 1945. UM-36. III. July 19, 1945. UM-38. C
- 2662 Powders containing paraformaldehyde, by C. M. Huggett. June 26, 1945. UM/34. C
- 2663 The present status of internal ballistics of rockets, by Bryce L. Crawford, jr. Nov. 1943. UM/RPP-1. C
- 2664 Products of reaction at various pressures, by B. L. Crawford, jr., J. J. McBrady and Marie S. Hanson. Jan. 9, 1945. UM/26. C
- 2665 A review of the available literature on the mechanism of combustion of double-base powders, by Bryce L. Crawford, jr. and Clayton Huggett. Jan. 28, 1943. A-130. OSRD 1188. C
- 2666 Slow-burning powders, by B. L. Crawford, jr., C. M. Huggett, R. G. Parr, Marie S. Hanson, Phyllis Burchill, J. J. McBrady and I. I. Rusoff. Nov. 21, 1944. UM-22. II. Feb. 13, 1945. UM-28. C
- 2667 The temperature of the black powder flame, by B. L. Crawford, jr. and R. J. Glodhill. Jan. 5, 1945. UM/25. C
- 2668 Variation of the "dark zone" with pressure, by B. L. Crawford, jr., C. M. Huggett, R. G. Parr and J. J. McBrady. Oct. 26, 1944 and Aug. 15, 1945. UM/21, 37. C
- 2669 Variations in burning rate with the direction of burning of colloidal powder grains, by Clayton Huggett and Bryce L. Crawford, jr. Dec. 20, 1943. UM/14. C
- NATIONAL BUREAU OF STANDARDS
Washington, D. C.
Projects CWS-22, NO-33, NO-99, OD-14, OD-26.
- 2673 Microscopic examination of extruded smokeless powders, by Charles Proffer Saylor. Dec. 19, 1942. A-127. OSRD-1136. C
- 2674 Microscopic structure and the development of flaws in extruded grains of NT smokeless powder, by Charles Proffer Saylor. Nov. 24, 1942. A-117. OSRD 1070. C
- WESTERN ELECTRIC COMPANY, INC., New York, N. Y. OEMsr-256
Projects CWS-22, CWS-30, NO-33, NO-34.1, NO-35.1, NO-36.5, NO-99, NO-118, NO-120, NO-247, NO-248, NO-249, NO-252, NO-253, OD-14, OD-26, OD-66, OD-155, OD-163, OD-166. See also Budd Induction Heating, Inc., OEMsr-671; Budd Wheel Company, Inc., OEMsr-968; California Institute of Technology, OEMsr-418; and George Washington University, OEMsr-273.
- 2679 The design of a 4.2-in. recoilless mortar mount; final report by J. M. Dietz. Jan. 3, 1946. OSRD 6164. R
- 2681 The development of an electro-magnetic fuze; final report by D. D. Miller. [1945] C
- 2685 The firing of rockets by induction methods; final report by J. M. Melick. Jan. 3, 1946. OSRD 6166. R
- 2687 Mechanical arming propeller for 12-in. jet-accelerated AP bomb; final report by R. F. Mallina. Dec. 12, 1945. OSRD 6155. R

- 2689 Ripple firing mechanism for launching rockets; final report by D. D. Miller and T. H. Guettich. Feb. 9, 1946. OSRD 6158. R
- 2690 Rocket developments; summary report [of 16 final OSRD reports] by S. R. Avella. Feb. 15, 1946. OSRD 6170. C
- 2691 Rocket launchers for use on aircraft; final report by J. M. Dietz, C. A. Hasslacher and J. H. Mogler. Jan. 3, 1946. OSRD 6162. C
- 2694 Basic flow properties of powders of various compositions, by Robert Burns. Jan. 22, 1943. A-134. OSRD 1212. C
- 2695 Development of O.F.H.C. copper pressure balls for use in small arms, rocket launchers, and mortars. Aug. 28, 1944. C
- 2697 Instructions for use of the ribbon-frame camera, by M. J. Walker. Feb. 16, 1944. A-251. OSRD 3280. R
- 2698 Jungle launchers, by R. F. Mallina. Jan. 1, 1944. A-81M. OSRD 3083. C
- 2701 The ribbon-frame camera, by Frank Reck. July 9, 1943. A-196. OSRD 1605. R
- 2702 Rocket firing mechanism for 56 rocket launcher, by D. D. Miller. Feb. 5, 1945. C
- 2703 "Study of firing control circuit for mine clearing device proposed by the Engineer Board of the Corps of Engineers." [July 1945] C
- 2704 Vertical rocket launcher for airplanes, by R. F. Mallina. Jan. 1, 1944. A-80M. OSRD-3082. C
- UNIVERSITY OF WISCONSIN, Madison, Wis. OEMsr-762
Projects OD-14, OD-26
- 2705 Studies of the mechanism of burning of double-base rocket propellants; final report by Farrington Daniels, R. E. Gluyas, N. F. Hall, S. S. Penner and R. E. Wilfong [Jan. 1945] A-485. OSRD-6559. R
- 2706 Absorption coefficients of A-77 powders, by S. S. Penner. Nov. 14, 1944. C
- 2707 Absorption coefficients 77 e and f, by Farrington Daniels. June 24, 1944. C
- 2708 The absorption of radiation between 0.5 μ and 5.5 μ by double base powder with special reference to the A-77 series, by S. S. Penner and Farrington Daniels. July 5, 1944. C
- 2709 Absorption spectra of the A-77 powders; preliminary report by Farrington Daniels. June 3, 1944. C
- 2710 Additional work on the prevention of fissuring by sweeping out air with carbon dioxide, by Farrington Daniels and Robert E. Wilfong. July 15, 1943. C
- 2711 Calculation of mass emissivities from restricted burning data, by S. S. Penner. Nov. 30, 1944. C

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- 2712 The elimination of fissures in powder by displacing the air in the presses with carbon dioxide, by Farrington Daniels and Robert E. Wilfong. [June 21, 1943] and July 5, 1943. Title varies. C
- 2713 Emission spectrum of salted powder and influence of radiation on burning rates, by Farrington Daniels. Jan. 29, 1944. C
- 2714 Hypothesis for burning mechanism with special reference to double base powders in jet propulsion motors, by Farrington Daniels. July 24, 1943. C
- 2715 Hypothesis for the mechanism of burning powder, by Farrington Daniels. Sept. 25, 1943. C
- 2716 Infra-red emission and absorption spectra of double base powder, by Forrest S. Mortimer, Farrington Daniels and C. Keith McLane. June 24 and Sept. 18, 1943. C
- 2717 [Letters from Forrest S. Mortimer to Prof. Brice L. Crawford] Feb. 4, 1943. R
- 2718 The mechanism of powder burning; summary by Farrington Daniels, Robert E. Wilfong, Forrest S. Mortimer, C. Keith McLane, Norman L. Rosenberg, Carl W. Schuler and Jacob Sedlet. Dec. 18, 1943. C
- 2720 Recommendation of manganese dioxide as an ingredient in propellants, and summary report, by Farrington Daniels. July 22, 1944. C
- 2721 A small aneroid calorimeter for determining heats of explosion; preliminary report by Norris F. Hall and Farrington Daniels. Aug. 25, 1944. C

- 2722 [Studies of the mechanism of burning of double-base rocket propellants] Progress reports by Farrington Daniels. Jan. 1-Oct. 1, 1944. C
- 2724 Theories of burning of double base powder, by Farrington Daniels. Feb. 28, 1944. C
- 2725 The x-ray detection of imperfections in double base powder; preliminary report by Farrington Daniels. Oct. 24, 1942. C

DIVISION AND MISCELLANEOUS

- 2727 Annotated bibliography of NDRC technical reports and memorandums of Division 3. Sept. 20, 1944 and May 1, 1945. A-101M, 107M. OSRD-4152C, 4830C. C
- 2735 A brief historical account of the development of the fins for the 4½" army rocket, by C. N. Hickman. May 30, 1944. With this is bound: Design of the tail end of the 4½" rocket, by C. F. Spahn. May 8, 1944. C
- 2736 Catalog of 16 mm films; film library of Division 3 NDRC, edited by F. W. Cummings and E. B. Bradford. [Apr. 23, 1945] C
- 2737 Derivations of formulas used in computing effective gas velocity and rocket velocity from measured impulse, by Jesse W. M. DuMond. [1944] Letter no. A-1L. C
- 2738 11"75 rocket ammunition; description and instructions for use (Preliminary). July 13, 1944. Ordnance pamphlet no. 1227. C
- 2739 4.2-inch recoilless chemical mortar E34R1. Dec. 21, 1944. TB CW 24. C

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| 2740 Functions and facilities of contractors; report by Section H. July 15, 1944. C | 2745 Photographing rockets at right angles to their line of flight, by C. N. Hickman. [1942] and May 23, 1942. Letter no. A-2L. C |
| 2742 Memorandum summarizing tests on electric condenser type fuse; intermediate report. Apr. 2, 1943. NY-1. C | 2748 Rocket launchers, Mark 17 and Mark 17, Model 1. Description and instructions for use. Aug. 30, 1944. Ordnance pamphlet no. 1133. R |
| 2743 News letter; items of interest on current rocket developments, edited by P. T. Kirwan. Vol. 3, no. 12. June 25, 1945. OSRD 5272. R | 2749 7.2" rocket launchers Mark 20, Mark 22, and ammunition. Nov. 30, 1943. Ordnance pamphlet no. 1002. First revision. C |
| 2744 News letters; items of interest on current rocket developments, edited by P. T. Kirwan. Vol. 1. Weekly news letters, nos. 8-42. Vol. 2. Weekly news letters, nos. 1-30; semi-monthly news letters, nos. 31-40. Vol. 3. Semi-monthly news letters, nos. 1-11, 13-14. May 3, 1943-July 25, 1945. OSRD-nos. 4120, 4163, 4242a, 4271, 4322, 4370, 4437, 4491, 4582, 4641, 4686, 4749, 4802, 4858, 4912, 4958, 5035, 5112, 5182, 5327, 5442. Title varies. C | 2750 Special fuzes for rockets, projector charges and miscellaneous munitions. June 13, 1944. Ordnance pamphlet no. 1017. First revision. R |
| | 2753 Summary of rocket applications being developed by Division A of the National Defense Research Committee, by Alexander Kossiakoff. July 20, 1942. C |

Item numbers which include a letter, i.e. 1740a, indicate reports which were received too late to be included in the original numbering.

CONTRACTOR INDEX

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Bell Telephone Laboratories		
<u>see</u> Western Electric Company, Inc.		
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Budd Wheel Company, Inc.	OEMsr-968	1203-1238
California Institute of Technology	OEMsr-418	1239-2094
	OEMsr-702	2095-2108
CIT		
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OEMsr-337	Hercules Powder Company	2638-2642
OEMsr-416	Hercules Powder Company	2643
OEMsr-418	California Institute of Technology	1239-2094
OEMsr-520	Hercules Powder Company	*
OEMsr-671	Budd Induction Heating, Inc.	1202
OEMsr-702	California Institute of Technology	2095-2108
OEMsr-716	University of Minnesota	2644-2669
OEMsr-733	Duke University	2111-2114
OEMsr-762	University of Wisconsin	2705-2725
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433	2429	2118	1376	2186	2006
563	1279		1687	2187	1894
665	2446	2119	1647	2188	1396
673	2346	2120	1855	2189	1529
691	2389	2121	1262	2190	1462
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798	1882	2124	2006	2193	1262
803	1277	2125	1894	2194	1798
805	1788	2126	1482	2195	1837
815	1320	2127	1855	2196	2006
842	1603	2128	1262	2197	1380
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872	1987	2130	1837	2199	1855
888	2334	2131	2006	2200	1262
895	1640	2132	1894	2201	1798
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911	1987	2134	1497	2203	2006
920	2597	2135	1348	2204	1649
924	2552	2136	1855	2205	1607
951	1620	2137	1262	2206	1838
965	2498	2138	1798	2207	1855
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1082	1972	2143	1798	2212	1894
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1152	2100	2149	1798	2218	1855
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1171	1521	2151	2006	2220	1798
1183	1561	2152	1609	2221	1837
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1191	1765	2154	1855	2223	2036
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1242	2000	2157	1837	2226	1380
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1266	1495	2159	1894	2228	1855
1305	1554	2160	2005	2229	1262
1370	2657	2161	2054	2230	1798
1461	1555	2162	1855	2231	1837
1605	2701	2163	1262	2232	2006
1623	2246	2164	1798	2233	1894
1632	1464	2165	1837	2234	1649
1658	2322	2166	2006	2235	1324
1846	2643	2167	1408	2236	1656
1886	2316	2168	1855	2237	1855
1993	2297	2169	1262	2238	1262
2069	2400	2170	1798	2239	1798
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2253	2006	2322	1262	2391	1262
2254	1308	2323	1798	2392	1798
2255	2088	2324	1837	2393	1837
2256	1380	2325	2006	2394	2006
2257	1855	2326	1496	2395	1547
2258	1262	2327	1380	2396	1855
2259	1798	2328	1855	2397	1262
2260	1837	2329	1262	2398	1798
2261	2006	2330	1798	2399	1837
2262	1894	2331	1837	2400	2006
2263	1343	2332	2006	2401	1855
2264	1590	2333	1601	2402	1262
2265	1855	2334	1855	2403	1798
2266	1262	2335	1262	2404	1837
2267	1798	2336	1798	2405	2006
2268	1837	2337	1837	2406	1380
2269	2006	2338	2006	2407	1410
2270	1316	2339	2056	2408	1763
2271	1567	2340	1855	2409	1661
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2277	1262	2346	2007	2415	1248
2278	1798	2347	1601	2416	1855
2279	1837	2348	1631	2417	1262
2280	2006	2349	1686	2418	1798
2281	2063	2350	1387	2419	1837
2282	2087	2351	1855	2420	2006
2283	1380	2352	1262	2421	1650
2284	1523	2353	1798	2422	1840
2285	1855	2354	1837	2423	1855
2286	1262	2355	2006	2424	1262
2287	1798	2356	1894	2425	1798
2288	1837	2357	1597	2426	1837
2289	2006	2358	1380	2427	2006
2290	2015	2359	1855	2428	1784
2291	1415	2360	1262	2429	1380
2292	1855	2361	1798	2431	1659
2293	1262	2362	1837	2432	1380
2294	1798	2363	2006	2433	1596
2295	1837	2364	1668	2434	1855
2296	2006	2365	1814	2435	1262
2297	1894	2366	1884	2436	1798
2298	1459	2367	1855	2437	1837
2299	1855	2368	1262	2438	2009
2300	1262	2369	1798	2439	2031
2301	1798	2370	1837	2440	1250
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2303	2006	2372	1759	2442	1262
2304	1380	2373	1380	2443	1798
2305	2024	2374	1501	2444	1837
2306	1855	2375	1855	2445	2009
2307	1262	2376	1262	2446	2031
2308	1798	2377	1798	2447	1380
2309	1837	2378	1837	2448	1841
2310	2006	2379	2006	2449	1595
2311	1652	2380	1496	2450	1380
2312	2012	2381	1938	2451	1855
2313	1416	2382	1601	2452	1262
2314	2014	2383	1651	2453	1798
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2460	1855	2534	1373	3341	1856
2461	1262	2535	1448	3361	1708
2462	1798	2536	1811	3380	1856
2463	1837	2537	1418	3381	1798
2464	2009	2538	1839	3382	1837
2465	2031	2539	1444	3383	2006
2466	1380	2540	2011	3391	1856
2467	1432	2541	1901	3392	1798
2468	1973	2542	1399	3393	2006
2469	1855	2543	1637	3394	1837
2470	1262	2544	1240	3429	2218
2471	1798	2545	1245	3430	1635
2472	1837	2546	1244	3431	1286
2473	2009	2547	1241	3432	1823
2474	2031	2548	1246	3438	1856
2475	2037	2549	1242	3439	1944
2476	1595	2550	1239	3440	2027
2477	1855	2551	1247	3457	1262
2478	1262	2552	1243	3458	1594
2479	1798	2553	1419	3468	1798
2480	1837	3050	1751	3469	1837
2481	2009	3073	1877	3470	2006
2482	2031	3082	2704	3471	1894
2483	1863	3083	2698	3472	1798
2484	1537	3091	1856	3473	1837
2485	1380	3092	1798	3474	2006
2486	1855	3093	1837	3492	1455
2487	1262	3094	2006	3493	1798
2488	1798	3095	1894	3494	1837
2489	1837	3096	1289	3495	2006
2490	2009	3145	1856	3496	1894
2491	2031	3146	1798	3497	1289
2492	1836	3147	1837	3500	1856
2493	1855	3167	1616	3502	1435
2494	1262	3188	1856	3503	1667
2495	1798	3189	1798	3504	1618
2496	1837	3190	1837	3517	1856
2497	2009	3191	2006	3518	1798
2498	2031	3192	1289	3519	1837
2499	1598	3203	1887	3520	2006
2501	1423	3221	1856	3527	1856
2502	1380	3222	1856	3528	1798
2503	1380	3223	1798	3529	1837
2505	1855	3224	1837	3530	2006
2506	1262	3225	2006	3531	1894
2507	1798	3226	1289	3544	2660
2508	2009	3234	1898	3563	1251
2509	2031	3250	1798	3570	1856
2510	1855	3251	1837	3571	1798
2511	1262	3252	2006	3572	1837
2512	1798	3253	1894	3573	2006
2513	2009	3270	1463	3592	1404
2514	2031	3271	1370	3609	1856
2515	1305	3275	1289	3610	1798
2516	1679	3276	1894	3611	1837
2517	1669	3277	2006	3612	2006
2518	1342	3278	1837	3615	1409
2519	1660	3279	1798	3634	1485
2520	1855	3280	2697	3635	1865
2521	1262	3289	1856	3737	1856
2522	1798	3290	1330	3638	1798
2523	2009	3301	1862	3639	1837
2524	2031	3302	1405	3640	2006
2525	1849	3304	1666	3644	1730
2526	1847	3305	1798	3645	2000
2527	1994	3306	1837	3646	1436
2528	1548	3307	2006	3647	1894
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3685	1837	4443	2507	5799	2190
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3690	1893	4491	2744	5802	2194
3705	1386	4495	2507	5805	2175
3707	1856	4524	2507	5806	2181
3708	1798	4568	2297	5808	2156
3709	1837	4569	2513	5812	2120
3710	2006	4577	2507	5814	2161
3719	1685	4582	2744	5816	2132
3720	1524	4611	2507	5818	2174
3727	2507	4640	2507	5820	2195
3728	2507	4641	2744	5821	2122
3729	2507	4665	2507	5822	2192
3730	2507	4686	2744	5824	2146
3731	2507	4687	2507	5827	2123
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3734	2507	4749	2744	5831	2149
3735	2507	4802	2744	5832	2152
3736	1348	4803	2507	5833	2134
3737	1798	4828	2507	5834	2187
3738	1837	4830c	2727	5837	2204
3739	2006	4858	2744	5841	2133
3740	1856	4892	2507	5844	2145
3764	1262	4908	2507	5845	2177
3765	1798	4912	2744	5851	2155
3766	1837	4939	2507	5852	2173
3767	2006	4942	2297	5855	2200
3788	2507	4958	2744	5879	2170
3790	2085	4972	2507		2261
3826	2507	5009	2507	5880	2138
3831	2507	5035	2744	5881	2179
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3860	2507	5061	2507	5883	2186
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3879	2507	5112	2744	5889	2147
3880	2373	5130	2507	5890	2182
3887	1637	5170	2507	5891	2130
3901	2507	5182	2744	5893	2164
3931	2507	5193	2507	5897	2208
3965	2507	5218	2507	5932	2201
3986	2507	5255	2507	6133	1221
3992	2511	5272	2743	6136	1203
4021	2507	5292	2507	6137	1222
4041	2507	5316	2507	6138	1212
4061	2507	5327	2744	6139	1211
4088	2507	5394	2453	6140	1208
4120	2744	5442	2744	6141	1210
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4163	2744	5654	2207	6146	1219
4164	2507	5761	2166	6148	1207
4201	2507	5776	2143	6149	1218
4227	2507	5779	2206	6150	1205
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4248	2507	5781	2176	6153	1220
4271	2744	5784	2139	6155	2687
4274	2507	5785	2141	6158	2689
4275	1516	5786	2137	6162	2691
4295	2507	5788	2135	6164	2679
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